

ELECTRIC POWER GENERATION, TRANSMISSION, AND DISTRIBUTION  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926 Subpart  
V AND 29 CFR 1910.269) AND THE ELECTRICAL PROTECTIVE EQUIPMENT  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926.97 AND  
29 CFR 1910.137)  
1218-0253  
June 2017

**SUPPORTING STATEMENT FOR THE  
INFORMATION COLLECTION REQUIREMENTS  
OF THE ELECTRIC POWER GENERATION, TRANSMISSION, AND  
DISTRIBUTION STANDARDS FOR CONSTRUCTION AND  
GENERAL INDUSTRY (29 CFR 1926 SUBPART V AND 29 CFR 1910.269) AND THE  
ELECTRICAL PROTECTIVE EQUIPMENT STANDARDS FOR  
CONSTRUCTION AND GENERAL INDUSTRY  
(29 CFR 1926.97 AND 29 CFR 1910.137)<sup>1</sup>  
OMB CONTROL NUMBER 1218-0253  
(June 2017)**

**A. JUSTIFICATION**

**1. Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.**

The main objective of the Occupational Safety and Health Act of 1970 (the Act) is to “assure so far as possible every working man and woman in the Nation safe and healthful working conditions and to preserve our human resources.” (29 U.S.C. 651(b).) To achieve this objective, the Act authorizes “the development and promulgation of occupational safety and health standards.” (29 U.S.C. 651(b)(9).)

Section 6(b)(7) of the Act specifies that “[a]ny standard promulgated under this subsection shall prescribe the use of labels or other appropriate forms of warning as are necessary to insure that employees are apprised of all hazards to which they are exposed, relevant symptoms and appropriate emergency treatment, and proper conditions and precautions of safe use or exposure.” This provision states further that “[t]he Secretary ... may by rule ... make appropriate modifications in the foregoing requirements relating to the use of labels or other forms of warning ... as may be warranted by experience, information, or medical or technological developments acquired subsequent to the promulgation of the relevant standard.” (29 U.S.C. 655(b)(7).)

With regard to recordkeeping, the Act specifies that “[e]ach employer shall make, keep and preserve, and make available to the Secretary ... such records ... as the Secretary ... may prescribe by regulation as necessary or appropriate for the enforcement of this Act ....” (29 U.S.C.657(c)(1).) The Act states further that “[t]he Secretary ... shall prescribe such rules and regulations as he [or she] may deem necessary to carry out [his or her] responsibilities under this

---

<sup>1</sup>The purpose of this supporting statement is to analyze and describe the burden hours and cost associated with provisions of the standards that contain collection of information requirements; this supporting statement does not provide information or guidance on how employers would comply with these provisions, or how the Agency would enforce these provisions.

ELECTRIC POWER GENERATION, TRANSMISSION, AND DISTRIBUTION  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926 Subpart  
V AND 29 CFR 1910.269) AND THE ELECTRICAL PROTECTIVE EQUIPMENT  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926.97 AND  
29 CFR 1910.137)  
1218-0253  
June 2017

Act, including rules and regulations dealing with the inspection of an employer’s establishment.”  
(29 U.S.C. 657(g)(2).)

Under the authority granted by the Act, the Occupational Safety and Health Administration (OSHA or the Agency) published a rule covering construction work involving electric power transmission and distribution lines and equipment (29 CFR Part 1926, Subpart V), general industry work involving electric power generation, transmission, and distribution lines and equipment (29 CFR 1910.269), and electrical protective equipment for construction work and general industry work (29 CFR 1926.97 and 29 CFR 1910.137, respectively) to ensure safe work practices for workers performing maintenance and repair in and around power lines and equipment. .

**2. Indicate how, by whom, and for what purpose the information is to be used. Except for a new collection, indicate the actual use the Agency has made of the information received from the current collection.**

The Electric Power Transmission and Distribution Standard for Construction relies heavily on materials from national consensus standards developed by organizations such as the National Electrical Safety Code, American Society for Testing and Materials, National Fire Protection Association, and the Institute of Electrical and Electronic Engineers. The following table describes each collection of information in detail.

Section	Standard Text
<i>Electrical protective equipment</i>	
§1910.137(c)(2)(xii)	<p>(xii) The employer shall certify that equipment has been tested in accordance with the requirements of paragraphs (c)(2)(iv), (c)(2)(vii)(D), (c)(2)(viii), (c)(2)(ix), and (c)(2)(xi) of this section. The certification shall identify the equipment that passed the test and the date it was tested and shall be made available upon request to the Assistant Secretary for Occupational Safety and Health and to employees or their authorized representatives.</p> <p><b>Note to paragraph (c)(2)(xii) of this section:</b> Marking equipment with, and entering onto logs, the results of the tests and the dates of testing are two acceptable means of meeting the certification requirement.</p>
§1926.97(c)(2)(xii)	<p>(xii) The employer shall certify that equipment has been tested in accordance with the requirements of paragraphs (c)(2)(iv), (c)(2)(vii)(D), (c)(2)(viii), (c)(2)(ix), and (c)(2)(xi) of this section. The certification shall identify the equipment that passed the test and the date it was tested and shall be made available upon request to the Assistant Secretary for Occupational Safety and Health and to</p>

ELECTRIC POWER GENERATION, TRANSMISSION, AND DISTRIBUTION  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926 Subpart  
V AND 29 CFR 1910.269) AND THE ELECTRICAL PROTECTIVE EQUIPMENT  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926.97 AND  
29 CFR 1910.137)

1218-0253

June 2017

Section	Standard Text
	<p>employees or their authorized representatives.</p> <p><b>Note to paragraph (c)(2)(xii) of this section:</b> Marking equipment with, and entering onto logs, the results of the tests and the dates of testing are two acceptable means of meeting the certification requirement.</p>
	<p>In §§1910.137(c)(2)(xii) and 1926.97(c)(2)(xii), the OSHA standards for electrical protective equipment require employers to certify testing of rubber insulating equipment in accordance with those two sections. The certifications must identify the equipment that passed the test and the date it was tested. The two standards require testing: periodically (generally, every 6 months for rubber insulating gloves and every 12 months for most other types of rubber insulating equipment); after any repairs; and before the equipment is returned to service after any inspection finds certain defects. In addition, the employer must test rubber insulating gloves before reuse after employees use them without protector gloves and must certify that testing.</p> <p>The purpose of the certification requirements is to enable OSHA, employers, and employees to determine that the employer has tested electrical protective equipment as the standards require. These certification and testing provisions are in performance-oriented language that allows the employer to maintain the certifications in a wide range of formats, including written and electronic. Consequently, these performance-based standards ensure that employers maintain the most recent test records for equipment that passes the required tests without specifying precisely how the employer must maintain those records.<sup>2</sup> In fact, notes to §§1910.137(c)(2)(xii) and 1926.97(c)(2)(xii) indicate that stamping the test date on the equipment is an acceptable means of certification. Although the notes do not state explicitly that employers may remove older dates, leaving old dates on equipment would make determining compliance difficult, and OSHA anticipates that most employers will remove markings of test dates other than the current one. Based on the maximum periods between tests, the retention period will be no longer than 6 months for rubber insulating gloves and normally 12 months for other types of rubber insulating equipment.<sup>3</sup></p> <p>Employers and employees use this collection of information to ensure that electrical protective equipment is reliable and safe for worker use and will provide adequate protection to workers</p>

<sup>2</sup> Note that the standards do not require employers to keep records of failing tests.

<sup>3</sup> The standard does not require the employer to test rubber insulating line hose or covers on a regular basis. However, the employer must test this equipment, and certify that it passed the tests, when the employer repairs the equipment and when there is an indication that its insulating value is suspect. Such testing is relatively rare, and the employer would need to retain records associated with the testing for the useful life of the equipment or until another test occurs.

ELECTRIC POWER GENERATION, TRANSMISSION, AND DISTRIBUTION  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926 Subpart  
V AND 29 CFR 1910.269) AND THE ELECTRICAL PROTECTIVE EQUIPMENT  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926.97 AND  
29 CFR 1910.137)  
1218-0253  
June 2017

Section	Standard Text
	<p>against electrical hazards. OSHA uses this collection of information to determine if employers are in compliance with the equipment-testing requirements of the standard.</p> <p><b>Note:</b> OSHA concludes that engaging in this collection of information is a usual and customary practice, as reflected in guidance in national consensus standards used by employers subject to the final rule, including American Society for Testing and Materials (ASTM) D120, ASTM D 1048, and ASTM D 1051. Therefore, OSHA concludes that there is no burden associated with this information collection. Consequently, the burden-hour calculations presented under Item 12 include no burden for this provision.</p>
<i>Electric power generation, transmission, and distribution</i>	
<p>§1910.269(a)(3)(i)</p>	<p>(i) Before work begins, the host employer shall inform contract employers of:</p> <p>(A) The characteristics of the host employer’s installation listed in paragraphs (a)(4)(i) through (a)(4)(v) of this section;  <b>Note to paragraph (a)(3)(i)(A) of this section:</b> This paragraph requires the host employer to obtain information listed in paragraphs (a)(4)(i) through (a)(4)(v) of this section if it does not have this information in existing records.</p> <p>(B) Conditions listed in paragraphs (a)(4)(vi) through (a)(4)(viii) of this section that are known to the host employer;  <b>Note to paragraph (a)(3)(i)(B) of this section:</b> For the purposes of this paragraph, the host employer need only provide information to contract employers that the host employer can obtain from its existing records through the exercise of reasonable diligence. This paragraph does not require the host employer to make inspections of worksite conditions to obtain this information.</p> <p>(C) Information about the design and operation of the host employer’s installation that the contract employer needs to make the assessments required by this section; and  <b>Note to paragraph (a)(3)(i)(C) of this section:</b> This paragraph requires the host employer to obtain information about the design and operation of its installation that contract employers need to make required assessments if it does not have this information in existing records.</p> <p>(D) Any other information about the design and operation of the host employer’s installation that is known by the host employer, that the contract employer requests, and that is related to the protection</p>

ELECTRIC POWER GENERATION, TRANSMISSION, AND DISTRIBUTION  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926 Subpart  
V AND 29 CFR 1910.269) AND THE ELECTRICAL PROTECTIVE EQUIPMENT  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926.97 AND  
29 CFR 1910.137)  
1218-0253  
June 2017

Section	Standard Text
	<p>of the contract employer’s employees.  <b>Note to paragraph (a)(3)(i)(D) of this section:</b> For the purposes of this paragraph, the host employer need only provide information to contract employers that the host employer can obtain from its existing records through the exercise of reasonable diligence. This paragraph does not require the host employer to make inspections of worksite conditions to obtain this information.</p>
§1926.950(c)(1)	<p>(1) <i>Host employer responsibilities.</i> Before work begins, the host employer shall inform contract employers of:  (i) The characteristics of the host employer’s installation listed in paragraphs (d)(1) through (d)(5) of this section;  <b>Note to paragraph (c)(1)(i) of this section:</b> This paragraph requires the host employer to obtain information listed in paragraphs (d)(1) through (d)(5) of this section if it does not have this information in existing records.  (ii) Conditions listed in paragraphs (d)(6) through (d)(8) of this section that are known to the host employer;  <b>Note to paragraph (c)(1)(ii) of this section:</b> For the purposes of this paragraph, the host employer need only provide information to contract employers that the host employer can obtain from its existing records through the exercise of reasonable diligence. This paragraph does not require the host employer to make inspections of worksite conditions to obtain this information.  (iii) Information about the design and operation of the host employer’s installation that the contract employer needs to make the assessments required by this subpart; and  <b>Note to paragraph (c)(1)(iii) of this section:</b> This paragraph requires the host employer to obtain information about the design and operation of its installation that contract employers need to make required assessments if it does not have this information in existing records.  (iv) Any other information about the design and operation of the host employer’s installation that is known by the host employer, that the contract employer requests, and that is related to the protection of the contract employer’s employees.  <b>Note to paragraph (c)(1)(iv) of this section:</b> For the purposes of this paragraph, the host employer need only provide</p>

ELECTRIC POWER GENERATION, TRANSMISSION, AND DISTRIBUTION  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926 Subpart  
V AND 29 CFR 1910.269) AND THE ELECTRICAL PROTECTIVE EQUIPMENT  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926.97 AND  
29 CFR 1910.137)  
1218-0253  
June 2017

Section	Standard Text
	<p>information to contract employers that the host employer can obtain from its existing records through the exercise of reasonable diligence. This paragraph does not require the host employer to make inspections of worksite conditions to obtain this information.</p>
	<p>Host employers<sup>4</sup> provide the information this collection of information requires to contract employers.<sup>5</sup> Host employers typically retrieve the information from existing records, although in rare cases host employers might need to make engineering determinations of information missing from existing records. The collection of information makes it possible for contract employers to comply with other provisions of the standard, as it is impossible, in most cases, for those employers to determine the information on their own. The transfer of information under this collection of information occurs during the normal course of communications between host employers and contract employers. The Agency does not use this collection of information for its own purposes, except in enforcing this and other provisions of the standard.</p>
<p>§1910.269(a)(3)(ii)</p>	<p>(ii) Contract employers shall comply with the following requirements:</p> <p>(A) The contract employer shall ensure that each of its employees is instructed in the hazardous conditions relevant to the employee’s work that the contract employer is aware of as a result of information communicated to the contract employer by the host employer under paragraph (a)(3)(i) of this section.</p> <p>(B) Before work begins, the contract employer shall advise the host employer of any unique hazardous conditions presented by the contract employer’s work.</p> <p>(C) The contract employer shall advise the host employer of any unanticipated hazardous conditions found during the contract employer’s work that the host employer did not mention under paragraph (a)(3)(i) of this section. The contract employer shall provide this information to the host employer within 2 working days after discovering the hazardous condition.</p>
<p>§1926.950(c)(2)</p>	<p>(2) <i>Contract employer responsibilities.</i> (i) The contract employer shall ensure that each of its employees is instructed in the</p>

<sup>4</sup>The standard defines “host employer” as: “[a]n employer that operates, or that controls the operating procedures for, an electric power generation, transmission, or distribution installation on which a contract employer is performing work covered by Subpart V of this part.” A host employer is typically an electric utility.

<sup>5</sup>The standard defines “contract employer” as: “[a]n employer, other than a host employer, that performs work covered by Subpart V of this part under contract.” A contract employer is typically a contractor working for an electric utility.

ELECTRIC POWER GENERATION, TRANSMISSION, AND DISTRIBUTION  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926 Subpart  
V AND 29 CFR 1910.269) AND THE ELECTRICAL PROTECTIVE EQUIPMENT  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926.97 AND  
29 CFR 1910.137)  
1218-0253  
June 2017

Section	Standard Text
	<p>hazardous conditions relevant to the employee’s work that the contract employer is aware of as a result of information communicated to the contract employer by the host employer under paragraph (c)(1) of this section.</p> <p>(ii) Before work begins, the contract employer shall advise the host employer of any unique hazardous conditions presented by the contract employer’s work.</p> <p>(iii) The contract employer shall advise the host employer of any unanticipated hazardous conditions found during the contract employer’s work that the host employer did not mention under paragraph (c)(1) of this section. The contract employer shall provide this information to the host employer within 2 working days after discovering the hazardous condition.</p>
	<p>Contract employers gather the information required under these collections of information from host employers, existing records, and information discovered during the course of work. Employees of contract employers use the collection of information required under §§1910.269(a)(3)(ii)(A) and 1926.950(c)(2)(i) to comply with the work-practice requirements of the standard. Host employers use the information resulting from §§1910.269(a)(3)(ii)(B) and (a)(3)(ii)(C) and 1926.950(c)(2)(ii) and (c)(2)(iii) to establish and implement effective hazard-control measures for previously undiscovered hazards. The transfer of information under these collections of information occurs during the normal course of communications between contract employers and their employees and between contract employers and host employers. The Agency does not use these collections of information for its own purposes, except in enforcing this and other provisions of the standard.</p>
§1910.269(c)(1)(i)	<p>(i) In assigning an employee or a group of employees to perform a job, the employer shall provide the employee in charge of the job with all available information that relates to the determination of existing characteristics and conditions required by paragraph (a)(4) of this section.</p>
§1926.952(a)(1)	<p>(1) <i>Information provided by the employer.</i> In assigning an employee or a group of employees to perform a job, the employer shall provide the employee in charge of the job with all available information that relates to the determination of existing characteristics and conditions required by §1926.950(d).</p>
	<p>Employers use this collection of information to brief employees about the hazards and existing conditions they might encounter on the job. The Agency does not collect this information for its own purposes, except in enforcing this and other provisions of the standard.</p>

ELECTRIC POWER GENERATION, TRANSMISSION, AND DISTRIBUTION  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926 Subpart  
V AND 29 CFR 1910.269) AND THE ELECTRICAL PROTECTIVE EQUIPMENT  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926.97 AND  
29 CFR 1910.137)  
1218-0253  
June 2017

Section	Standard Text
§1910.269(p)(4)(ii)	(ii) A designated employee other than the equipment operator shall observe the approach distance to exposed lines and equipment and provide timely warnings before the minimum approach distance required by paragraph (p)(4)(i) of this section is reached, unless the employer can demonstrate that the operator can accurately determine that the minimum approach distance is being maintained.
§1926.959(d)(2)	(2) <i>Observer</i> . A designated employee other than the equipment operator shall observe the approach distance to exposed lines and equipment and provide timely warnings before the minimum approach distance required by paragraph (d)(1) of this section is reached, unless the employer can demonstrate that the operator can accurately determine that the minimum approach distance is being maintained.
<p>A designated employee observes the distance between energized parts and mechanical equipment operating near those parts. The designated employee warns the mechanical-equipment operator when that distance is close to the applicable minimum approach distance so that the operator can stop the equipment from coming too close to energized parts. Employers and employees use this collection of information to prevent sparkover, which could lead to electrical-related injuries and fatalities to workers. The Agency does not use this collection of information for its own purposes, except in enforcing this and other provisions of the standard.</p> <p><b>Note:</b> It is usual and customary for affected employers engaged in electric power generation, transmission, and distribution work to engage in this collection of information, as reflected in the Edison Electric Institute/International Brotherhood of Electrical Workers (EEI/IBEW) draft standard<sup>6</sup> that formed the basis of a substantial number of requirements in existing §1910.269. Therefore, OSHA concludes that there is no burden associated with this information collection. Consequently, the burden-hour calculations presented under Item 12 include no burden for this provision.</p>	
§1910.269(l)(3)(ii)	(ii) No later than January 1, 2015, for voltages over 72.5 kilovolts, the employer shall determine the maximum anticipated per-unit transient overvoltage, phase-to-ground, through an engineering analysis or assume a maximum anticipated per-unit transient overvoltage, phase-to-ground, in accordance with Table R 9. When the employer uses portable protective gaps to control the maximum

<sup>6</sup>In recommending that OSHA develop a standard for the operation and maintenance of electric power generation, transmission, and distribution installations, EEI and IBEW submitted a draft standard (accessible at [www.regulations.gov](http://www.regulations.gov) under OSHA-S015-2006-0645-0006) and suggested that OSHA develop a proposal based on that draft. (See 59 FR 4320, 4322; Jan. 31, 1994.) That draft represented standard industry practice in 1989, and OSHA’s reliance on the draft standard in promulgating existing §1910.269 evidences its continued relevance.



ELECTRIC POWER GENERATION, TRANSMISSION, AND DISTRIBUTION  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926 Subpart  
V AND 29 CFR 1910.269) AND THE ELECTRICAL PROTECTIVE EQUIPMENT  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926.97 AND  
29 CFR 1910.137)  
1218-0253  
June 2017

Section	Standard Text
	<p>transient overvoltage, the value of the maximum anticipated per-unit transient overvoltage, phase-to-ground, must provide for five standard deviations between the statistical sparkover voltage of the gap and the statistical withstand voltage corresponding to the electrical component of the minimum approach distance. The employer shall make any engineering analysis conducted to determine maximum anticipated per-unit transient overvoltage available upon request to employees and to the Assistant Secretary or designee for examination and copying.</p> <p><b>Note to paragraph (I)(3)(ii) of this section:</b> See Appendix B to this section for information on how to calculate the maximum anticipated per-unit transient overvoltage, phase-to-ground, when the employer uses portable protective gaps to reduce maximum transient overvoltages.</p>
§1926.960(c)(1)(ii)	<p>(ii) No later than January 1, 2015, for voltages over 72.5 kilovolts, the employer shall determine the maximum anticipated per-unit transient overvoltage, phase-to-ground, through an engineering analysis or assume a maximum anticipated per-unit transient overvoltage, phase-to-ground, in accordance with Table V 8. When the employer uses portable protective gaps to control the maximum transient overvoltage, the value of the maximum anticipated per-unit transient overvoltage, phase-to-ground, must provide for five standard deviations between the statistical sparkover voltage of the gap and the statistical withstand voltage corresponding to the electrical component of the minimum approach distance. The employer shall make any engineering analysis conducted to determine maximum anticipated per-unit transient overvoltage available upon request to employees and to the Assistant Secretary or designee for examination and copying.</p> <p><b>Note to paragraph (c)(1)(ii) of this section:</b> See Appendix B to this subpart for information on how to calculate the maximum anticipated per-unit transient overvoltage, phase-to-ground, when the employer uses portable protective gaps to reduce maximum transient overvoltages.</p>
<p>In §§1910.269 and 1926.960, OSHA requires employers to establish minimum approach distances no less than the distances computed by tables in the two electric power generation, transmission, and distribution standards. For voltages over 72.5 kilovolts, the tables require the value for the maximum anticipated per-unit transient overvoltage, phase-to-ground as part of the computation.</p>	

ELECTRIC POWER GENERATION, TRANSMISSION, AND DISTRIBUTION  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926 Subpart  
V AND 29 CFR 1910.269) AND THE ELECTRICAL PROTECTIVE EQUIPMENT  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926.97 AND  
29 CFR 1910.137)  
1218-0253  
June 2017

Section	Standard Text
	<p>In §§1910.269(l)(3)(ii) and 1926.960(c)(1)(ii), for voltages over 72.5 kilovolts, OSHA requires employers to determine the maximum anticipated per-unit transient overvoltage, phase-to-ground, through an engineering analysis or assume a maximum anticipated per-unit transient overvoltage, phase-to-ground, in accordance with tables in the two standards. Employers choosing to perform an engineering analysis must make the analysis available upon request to employees and to the Assistant Secretary or designee for examination and copying.</p> <p>Implicit in the requirement to make the engineering analysis available to employees and the Assistant Secretary is an obligation for the employer to maintain a copy of that analysis for whatever period the employer relies on the analysis in establishing a specific minimum approach distance. Note that the standards do not require the employer to maintain copies of engineering analyses that the employer does not use in establishing its current minimum approach distances. Consequently, the standard does not require the employer to maintain copies of engineering analyses it used previously, but no longer uses in establishing minimum approach distances or copies of engineering analyses used for purposes other than establishing minimum approach distances.</p> <p>When not using the default values for maximum transient overvoltage for work on energized parts over 72.5 kV, the employer must use an engineering analysis to determine what the value of that overvoltage is. Typically, the electric utility owning the energized equipment performs this analysis and provides the results of that analysis to employees or contract employers hired to work on that equipment in compliance with §1910.269(a)(3)(i) and (c)(1)(i) and §§1926.950(c)(1) and 1926.952(a)(1).</p> <p>The maximum transient overvoltage affects the sparkover distance for electric circuit parts energized at more than 72.5 kV. The higher that overvoltage is, the greater the distance over which electric current can arc (called “sparkover”). Employers use the results of the engineering analysis in the calculation of minimum approach distances to protect employees from sparkover during energized work.</p> <p>The Agency does not use this collection of information for its own purposes, except in enforcing this and other provisions of the standard.</p>
<p>§1910.269(m)(3)(i), (m)(3)(v), (m)(3)(ix), and (m)(3)(x).</p>	<p>(3) <i>Deenergizing lines and equipment.</i> (i) The employee that the employer designates pursuant to paragraph (m)(2) of this section as being in charge of the clearance shall make a request of the system operator to deenergize the particular section of line or equipment. The designated employee becomes the employee in charge (as this term is used in paragraph (m)(3) of this section) and is responsible for the clearance.</p>

ELECTRIC POWER GENERATION, TRANSMISSION, AND DISTRIBUTION  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926 Subpart  
V AND 29 CFR 1910.269) AND THE ELECTRICAL PROTECTIVE EQUIPMENT  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926.97 AND  
29 CFR 1910.137)  
1218-0253  
June 2017

Section	Standard Text
	<p style="text-align: center;">* * *</p> <p>(v) Tags shall prohibit operation of the disconnecting means and shall indicate that employees are at work.</p> <p style="text-align: center;">* * *</p> <p>(ix) To transfer the clearance, the employee in charge (or the employee’s supervisor if the employee in charge must leave the worksite due to illness or other emergency) shall inform the system operator and employees in the crew; and the new employee in charge shall be responsible for the clearance.</p> <p>(x) To release a clearance, the employee in charge shall:</p> <p>(A) Notify each employee under that clearance of the pending release of the clearance;</p> <p>(B) Ensure that all employees under that clearance are clear of the lines and equipment;</p> <p>(C) Ensure that all protective grounds protecting employees under that clearance have been removed; and</p> <p>(D) Report this information to the system operator and then release the clearance.</p>
<p>§1926.961(c)(1), (c)(5), (c)(9), and (c)(10)</p>	<p>(c) <u>Deenergizing lines and equipment.</u> (1) Request to deenergize. The employee that the employer designates pursuant to paragraph (b) of this section as being in charge of the clearance shall make a request of the system operator to deenergize the particular section of line or equipment. The designated employee becomes the employee in charge (as this term is used in paragraph (c) of this section) and is responsible for the clearance.</p> <p style="text-align: center;">* * *</p> <p>(5) <u>Tags.</u> Tags shall prohibit operation of the disconnecting means and shall indicate that employees are at work.</p> <p style="text-align: center;">* * *</p> <p>(9) <u>Transferring clearances.</u> To transfer the clearance, the employee in charge (or the employee’s supervisor if the employee in charge must leave the worksite due to illness or other emergency) shall inform the system operator and employees in the crew; and the new employee in charge shall be responsible for the clearance.</p> <p>(10) <u>Releasing clearances.</u> To release a clearance, the employee in charge shall:</p> <p>(i) Notify each employee under that clearance of the pending release of the clearance;</p>

ELECTRIC POWER GENERATION, TRANSMISSION, AND DISTRIBUTION  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926 Subpart  
V AND 29 CFR 1910.269) AND THE ELECTRICAL PROTECTIVE EQUIPMENT  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926.97 AND  
29 CFR 1910.137)  
1218-0253  
June 2017

Section	Standard Text
	<ul style="list-style-type: none"> <li>(ii) Ensure that all employees under that clearance are clear of the lines and equipment;</li> <li>(iii) Ensure that all protective grounds protecting employees under that clearance have been removed; and</li> <li>(iv) Report this information to the system operator and then release the clearance.</li> </ul>
	<p>The electric power transmission and distribution industry uses a unique form of controlling electric energy on transmission and distribution lines and equipment. Because of the length of a typical transmission or distribution line, which can be many kilometers, it is impractical for employees to repeatedly traverse these lines to energize and deenergize them. Many years ago, electric utilities developed procedures for remote switching of transmission and distribution lines so that employees could remotely request energization or deenergization of the line. OSHA requirements for deenergizing electric power transmission and distribution lines and equipment mirror those industry-standard procedures.</p> <p>These procedures typically involve, and the OSHA standards require, that the employer designate an employee in charge, who is in charge of the clearance<sup>7</sup> for a line or equipment. When there is a system operator<sup>8</sup> for the line or equipment, the employee in charge of the clearance makes a request of the system operator to deenergize the line or equipment so that employees can work on that line or equipment. (When there is no system operator, the employee in charge performs the functions of the system operator.) The procedures also involve, and the OSHA standards require, placing tags on disconnecting means where the line or equipment has been isolated. The tags prohibit operation of the disconnecting means and indicate that employees are at work. Finally, the procedures involve, and the OSHA standards require, specific steps for transferring a clearance to another employee and releasing the clearance on completion of the work. These steps require the transfer of information between the employee in charge and the system operator and between the employee in charge and employees on the crew.</p> <p>These collections of information provide a degree of protection for employees working on deenergized lines and equipment by minimizing the possibility of reenergizing the lines or equipment by the operation of disconnecting means.<sup>9</sup></p>

<sup>7</sup>The OSHA standards, in §§1910.269(x) and 1926.968, define “clearance (for work)” as: “[a]uthorization to perform specified work or permission to enter a restricted area.”

<sup>8</sup>The OSHA standards, in §§1910.269(x) and 1926.968, define “system operator” as: “[a] qualified person designated to operate the system or its parts.”

<sup>9</sup>Note that there are other means of energizing deenergized lines and equipment (for example, through contact with another, energized line or through induced voltage). The OSHA standards provide additional requirements (for example, provisions on protective grounding) that further reduce the possibility that the lines and

ELECTRIC POWER GENERATION, TRANSMISSION, AND DISTRIBUTION  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926 Subpart  
V AND 29 CFR 1910.269) AND THE ELECTRICAL PROTECTIVE EQUIPMENT  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926.97 AND  
29 CFR 1910.137)  
1218-0253  
June 2017

Section	Standard Text
<p>The Agency does not use this collection of information for its own purposes, except in enforcing this and other provisions of the standard.</p> <p><b>Note:</b> It is usual and customary for affected employers engaged in electric power generation, transmission, and distribution work to engage in this collection of information, as reflected in the EEI/IBEW draft standard that formed the basis of a substantial number of requirements in existing §1910.269. Therefore, OSHA concludes that there is no burden associated with this information collection. Consequently, the burden-hour calculations presented under Item 12 include no burden for this provision.</p>	
§1910.269(o)(3)(iii)	<p>(iii) In field testing, or at a temporary test site not guarded by permanent fences and gates, the employer shall ensure the use of one of the following means to prevent employees without authorization from entering:</p> <p>(A) Distinctively colored safety tape supported approximately waist high with safety signs attached to it, * * *</p>
§1926.963(c)(3)	<p>(3) <i>Temporary test areas.</i> In field testing, or at a temporary test site not guarded by permanent fences and gates, the employer shall ensure the use of one of the following means to prevent employees without authorization from entering:</p> <p>(i) Distinctively colored safety tape supported approximately waist high with safety signs attached to it, * * *</p>
<p>Using safety tape with safety signs is one of three methods of guarding temporary test sites. (The other two methods do not impose information collection requirements on employers.) To comply with this collection of information, employers must purchase or reuse, and post, safety signs that meet the specifications in §1910.145 or §1926.200, as applicable.</p> <p>Employers use this collection of information to warn employees against entering temporary test sites, which pose serious electrical hazards from unguarded energized parts. The Agency does not use this collection of information for its own purposes, except in enforcing this and other provisions of the standard.</p> <p><b>Note:</b> OSHA concludes that engaging in this collection of information is a usual and customary practice, as reflected in guidance in national consensus standards used by employers subject to the final rule, specifically IEEE Std 510—<i>IEEE Recommended Practices for Safety in High-</i></p>	

equipment become energized or that limit the voltage on the lines and equipment in the event that they do become energized.

ELECTRIC POWER GENERATION, TRANSMISSION, AND DISTRIBUTION  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926 Subpart  
V AND 29 CFR 1910.269) AND THE ELECTRICAL PROTECTIVE EQUIPMENT  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926.97 AND  
29 CFR 1910.137)  
1218-0253  
June 2017

Section	Standard Text
<p><i>Voltage and High-Power Testing.</i> Therefore, OSHA concludes that there is no burden associated with this information collection. Consequently, the burden-hour calculations presented under Item 12 include no burden for this provision.</p>	
<p>§1910.269(u)(4)(iv)</p>	<p>(iv) The employer shall display signs at entrances to the rooms and other spaces warning unqualified persons to keep out.</p>
<p>§1910.269(v)(4)(iv)</p>	<p>(iv) The employer shall display signs at entrances to the rooms and other spaces warning unqualified persons to keep out.</p>
<p>§1926.966(e)(4)</p>	<p>(4) <i>Warning signs.</i> The employer shall display signs at entrances to the rooms and other spaces warning unqualified persons to keep out.</p>
<p>To comply with this collection of information, employers must purchase and post safety signs that meet the specifications in §1910.145 or §1926.200, as applicable.</p> <p>Employers use this collection of information to warn employees against entering rooms and other spaces containing electric supply equipment, which pose serious electrical hazards from unguarded energized parts. The Agency does not use this collection of information for its own purposes, except in enforcing this and other provisions of the standard.</p> <p><b>Note:</b> OSHA concludes that engaging in this collection of information is a usual and customary practice, as reflected in guidance in national consensus standards used by employers subject to the final rule, specifically the <i>National Electrical Safety Code</i> (ANSI/IEEE C2). Therefore, OSHA concludes that there is no burden associated with this information collection. Consequently, the burden-hour calculations presented under Item 12 include no burden for this provision.</p>	
<p>§1910.269(u)(6)(i)</p>	<p>(6) <i>Substation entry.</i> (i) Upon entering an attended substation, each employee, other than employees regularly working in the station, shall report his or her presence to the employee in charge of substation activities to receive information on special system conditions affecting employee safety.</p>
<p>§1926.966(g)(1)</p>	<p>(g) <i>Substation entry.</i> (1) <i>Report upon entering.</i> Upon entering an attended substation, each employee, other than employees regularly working in the station, shall report his or her presence to the employee in charge of substation activities to receive information on special system conditions affecting employee safety.</p>
<p>Upon entering an attended substation, employees, other than employees regularly working in</p>	

ELECTRIC POWER GENERATION, TRANSMISSION, AND DISTRIBUTION  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926 Subpart  
V AND 29 CFR 1910.269) AND THE ELECTRICAL PROTECTIVE EQUIPMENT  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926.97 AND  
29 CFR 1910.137)  
1218-0253  
June 2017

Section	Standard Text
	<p>the substation, must report to the employee in charge of substation activities. The employee in charge presents safety-related information to these new substation entrants.</p> <p>Employers use this information to ensure that employees entering substations have information on conditions that necessitate the use of extra safety precautions and to ensure a flow of important safety-related information from the employee in charge to employees about to work in the substation. The Agency does not use this collection of information for its own purposes, except in enforcing this and other provisions of the standard.</p> <p><b>Note:</b> It is usual and customary for affected employers engaged in electric power generation, transmission, and distribution work to engage in this collection of information, as reflected in the EEI/IBEW draft standard that formed the basis of a substantial number of requirements in existing §1910.269. Therefore, OSHA concludes that there is no burden associated with this information collection. Consequently, the burden-hour calculations presented under Item 12 include no burden for this provision.</p>
§1910.269(w)(6)(ii)	(ii) Before employees begin work in the vicinity of vehicular or pedestrian traffic that may endanger them, the employer shall place warning signs or flags and other traffic-control devices in conspicuous locations to alert and channel approaching traffic.
§1926.967(g)(2)	(2) <i>Controlling traffic</i> . Before employees begin work in the vicinity of vehicular or pedestrian traffic that may endanger them, the employer shall place warning signs or flags and other traffic-control devices in conspicuous locations to alert and channel approaching traffic.
	<p>To comply with this collection of information, employers must purchase or reuse, and post, safety signs that meet the specifications in §1910.145 or §1926.200, as applicable.</p> <p>Employers use this collection of information to protect employees by warning approaching pedestrian or vehicular traffic that employees are working in the area and by channeling approaching traffic away from the worksite. The Agency does not use this collection of information for its own purposes, except in enforcing this and other provisions of the standard.</p> <p><b>Note:</b> It is usual and customary for affected employers engaged in electric power generation, transmission, and distribution work to engage in this collection of information, as reflected in the <i>National Electrical Safety Code</i> (ANSI/IEEE C2) and the EEI/IBEW draft standard that formed the basis of a substantial number of requirements in existing §1910.269. Therefore, OSHA concludes that there is no burden associated with this information collection.</p>

ELECTRIC POWER GENERATION, TRANSMISSION, AND DISTRIBUTION  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926 Subpart  
V AND 29 CFR 1910.269) AND THE ELECTRICAL PROTECTIVE EQUIPMENT  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926.97 AND  
29 CFR 1910.137)  
1218-0253  
June 2017

Section	Standard Text
<p>Consequently, the burden-hour calculations presented under Item 12 include no burden for this provision.</p>	
<p>§1910.269(s)(1)(ii)</p>	<p>(ii) If the electromagnetic-radiation level within an accessible area associated with microwave communications systems exceeds the radiation-protection guide specified by §1910.97(a)(2), the employer shall post the area with warning signs containing the warning symbol described in §1910.97(a)(3). The lower half of the warning symbol shall include the following statements, or ones that the employer can demonstrate are equivalent:</p> <p style="padding-left: 40px;">Radiation in this area may exceed hazard limitations and special precautions are required. Obtain specific instruction before entering.</p>
<p>§1926.967(k)(1)(ii)</p>	<p>(ii) If the electromagnetic-radiation level within an accessible area associated with microwave communications systems exceeds the radiation-protection guide specified by §1910.97(a)(2) of this chapter, the employer shall post the area with warning signs containing the warning symbol described in §1910.97(a)(3) of this chapter. The lower half of the warning symbol shall include the following statements, or ones that the employer can demonstrate are equivalent:</p> <p style="padding-left: 40px;">Radiation in this area may exceed hazard limitations and special precautions are required. Obtain specific instruction before entering.</p>
<p>To comply with this collection of information, employers must purchase and post safety signs that meet the specifications in §1910.145 or §1926.200, as applicable, with the wording on the signs being equivalent to the OSHA-provided text in §1910.269(s)(1)(ii) or §1926.967(k)(1)(ii). (Note that, to the extent the standard requires signs with OSHA-provided text, the standard is not an information collection requirement.)</p> <p>Employers use this collection of information to warn employees that the radiation in an area may exceed hazard limitations, that employees must use special precautions, and that employees should obtain specific instruction before entering. The Agency does not use this collection of information for its own purposes, except in enforcing this and other provisions of the standard.</p> <p><b>Note:</b> It is usual and customary for affected employers engaged in electric power generation, transmission, and distribution work to engage in this collection of information, as reflected in the EEI/IBEW draft standard that formed the basis of a substantial number of requirements in</p>	



ELECTRIC POWER GENERATION, TRANSMISSION, AND DISTRIBUTION  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926 Subpart  
V AND 29 CFR 1910.269) AND THE ELECTRICAL PROTECTIVE EQUIPMENT  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926.97 AND  
29 CFR 1910.137)  
1218-0253  
June 2017

Section	Standard Text
	<p>existing §1910.269. In addition, the Agency believes that there are few, if any, employers developing their own wording for the required signs because there is no economic incentive for them to do so. Therefore, OSHA concludes that there is no burden associated with this information collection. Consequently, the burden-hour calculations presented under Item 12 include no burden for this provision.</p>
<p>§1910.269(d)(2)(iii), (d)(2)(v), (d)(2)(ix), (d)(3)(ii)(F), (d)(5), and (d)(8)(iv) [Paragraphs (d)(2)(vi), (d)(2)(vii) and (d)(2)(viii) included for reference.]</p>	<p>(iii) Procedures shall be developed, documented, and used for the control of potentially hazardous energy covered by paragraph (d) of this section.</p> <p style="text-align: center;">* * *</p> <p>(v) The employer shall conduct a periodic inspection of the energy control procedure at least annually to ensure that the procedure and the provisions of paragraph (d) of this section are being followed.</p> <p>(A) The periodic inspection shall be performed by an authorized employee who is not using the energy control procedure being inspected.</p> <p>(B) The periodic inspection shall be designed to identify and correct any deviations or inadequacies.</p> <p>(C) If lockout is used for energy control, the periodic inspection shall include a review, between the inspector and each authorized employee, of that employee’s responsibilities under the energy control procedure being inspected.</p> <p>(D) Where tagout is used for energy control, the periodic inspection shall include a review, between the inspector and each authorized and affected employee, of that employee’s responsibilities under the energy control procedure being inspected, and the elements set forth in paragraph (d)(2)(vii) of this section.</p> <p>(E) The employer shall certify that the inspections required by paragraph (d)(2)(v) of this section have been accomplished. The certification shall identify the machine or equipment on which the energy control procedure was being used, the date of the inspection, the employees included in the inspection, and the person performing the inspection.</p> <p><b>Note to paragraph (d)(2)(v)(E) of this section:</b> If normal work schedule and operation records demonstrate adequate inspection activity and contain the required information, no additional certification is required.</p> <p>(vi) The employer shall provide training to ensure that the purpose and function of the energy control program are understood by</p>

ELECTRIC POWER GENERATION, TRANSMISSION, AND DISTRIBUTION  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926 Subpart  
V AND 29 CFR 1910.269) AND THE ELECTRICAL PROTECTIVE EQUIPMENT  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926.97 AND  
29 CFR 1910.137)  
1218-0253  
June 2017

Section	Standard Text
	<p>employees and that the knowledge and skills required for the safe application, usage, and removal of energy controls are acquired by employees. The training shall include the following:</p> <p>(A) Each authorized employee shall receive training in the recognition of applicable hazardous energy sources, the type and magnitude of energy available in the workplace, and in the methods and means necessary for energy isolation and control.</p> <p>(B) Each affected employee shall be instructed in the purpose and use of the energy control procedure.</p> <p>(C) All other employees whose work operations are or may be in an area where energy control procedures may be used shall be instructed about the procedures and about the prohibition relating to attempts to restart or reenergize machines or equipment that are locked out or tagged out.</p> <p>(vii) When tagout systems are used, employees shall also be trained in the following limitations of tags:</p> <p>(A) Tags are essentially warning devices affixed to energy isolating devices and do not provide the physical restraint on those devices that is provided by a lock.</p> <p>(B) When a tag is attached to an energy isolating means, it is not to be removed without authorization of the authorized person responsible for it, and it is never to be bypassed, ignored, or otherwise defeated.</p> <p>(C) Tags must be legible and understandable by all authorized employees, affected employees, and all other employees whose work operations are or may be in the area, in order to be effective.</p> <p>(D) Tags and their means of attachment must be made of materials which will withstand the environmental conditions encountered in the workplace.</p> <p>(E) Tags may evoke a false sense of security, and their meaning needs to be understood as part of the overall energy control program.</p> <p>(F) Tags must be securely attached to energy isolating devices so that they cannot be inadvertently or accidentally detached during use.</p> <p>(viii) Retraining shall be provided by the employer as follows:</p> <p>(A) Retraining shall be provided for all authorized and affected employees whenever there is a change in their job assignments, a change in machines, equipment, or processes that present a new hazard</p>

ELECTRIC POWER GENERATION, TRANSMISSION, AND DISTRIBUTION  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926 Subpart  
V AND 29 CFR 1910.269) AND THE ELECTRICAL PROTECTIVE EQUIPMENT  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926.97 AND  
29 CFR 1910.137)  
1218-0253  
June 2017

Section	Standard Text
	<p>or whenever there is a change in the energy control procedures.</p> <p>(B) Retraining shall also be conducted whenever a periodic inspection under paragraph (d)(2)(v) of this section reveals, or whenever the employer has reason to believe, that there are deviations from or inadequacies in an employee’s knowledge or use of the energy control procedures.</p> <p>(C) The retraining shall reestablish employee proficiency and shall introduce new or revised control methods and procedures, as necessary.</p> <p>(ix) The employer shall certify that employee training has been accomplished and is being kept up to date. The certification shall contain each employee’s name and dates of training.</p> <p style="text-align: center;">* * *</p> <p>(F) Tagout devices shall warn against hazardous conditions if the machine or equipment is energized and shall include a legend such as the following: Do Not Start, Do Not Open, Do Not Close, Do Not Energize, Do Not Operate.</p> <p><b>Note to paragraph (d)(3)(ii)(F) of this section:</b> For specific provisions covering accident prevention tags, see §1910.145.</p> <p style="text-align: center;">* * *</p> <p>(5) <i>Notification.</i> Affected employees shall be notified by the employer or authorized employee of the application and removal of lockout or tagout devices. Notification shall be given before the controls are applied and after they are removed from the machine or equipment.</p> <p><b>Note to paragraph (d)(5) of this section:</b> See also paragraph (d)(7) of this section, which requires that the second notification take place before the machine or equipment is reenergized.</p> <p style="text-align: center;">* * *</p> <p>(iv) Whenever outside servicing personnel are to be engaged in activities covered by paragraph (d) of this section, the on-site employer and the outside employer shall inform each other of their respective lockout or tagout procedures, and each employer shall ensure that his or her personnel understand and comply with restrictions and prohibitions of the energy control procedures being used.</p>
Employers must develop and document lockout-tagout procedures for the effective control of	

ELECTRIC POWER GENERATION, TRANSMISSION, AND DISTRIBUTION  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926 Subpart  
V AND 29 CFR 1910.269) AND THE ELECTRICAL PROTECTIVE EQUIPMENT  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926.97 AND  
29 CFR 1910.137)  
1218-0253  
June 2017

Section	Standard Text
	<p>hazardous energy sources, conduct periodic inspections of the lockout-tagout procedures to ensure compliance (including a review, between the inspector and each authorized employee, of that employee’s responsibilities under the procedures, and certification that the inspector accomplished the periodic inspection), train employees in the program and procedures and certify that they accomplished the required training and that their training is up to date, apply tagout devices (when using the tagout option) containing certain warnings, notify employees at certain points during the lockout-tagout process, and exchange information about lockout-tagout procedures with outside servicing personnel.</p> <p>The lockout-tagout requirements in §1910.269(d) protect employees from hazards resulting from the startup of machinery and equipment while the employees are performing servicing or maintenance activities. Employers use the information collection requirements in §1910.269(d) to help ensure that employees completely deenergized the equipment for servicing and maintenance work, and that the equipment does not become reenergized and injure or kill employees during that work. The Agency does not use this collection of information for its own purposes, except in enforcing this and other provisions of the standard.</p> <p><b>Note:</b> The lockout-tagout requirements in §1910.269(d) apply only to work in generation establishments covered by §1910.269. The burden hour and cost analysis in the ICR for Control of Hazardous Energy (Lockout/Tagout)(29 CFR 1910.147), OMB Control Number 1218-0150, already includes the burden hours and costs for generation work associated with the lockout-tagout requirements in §1910.269(d). All employers that perform general industry work must follow the lockout-tagout requirements of §1910.147, Control of Hazardous Energy (Lockout/Tagout), which OSHA promulgated before §1910.269, and on which OSHA based the lockout-tagout requirements in §1910.269(d). While OSHA requests approval for these collections of information in the §1910.269 ICR, OSHA will reference the §1910.269(d) provisions in the §1910.147 ICR when requesting an extension for the §1910.147 ICR.</p>
<p>§1910.269(v)(7)(i)(A)</p>	<p>(7) <i>Chemical cleaning of boilers and pressure vessels.</i> The following requirements apply to chemical cleaning of boilers and pressure vessels:</p> <p>(i) Areas where chemical cleaning is in progress shall be cordoned off to restrict access during cleaning. If flammable liquids, gases, or vapors or combustible materials will be used or might be produced during the cleaning process, the following requirements also apply:</p> <p>(A) The area shall be posted with signs restricting entry and warning of the hazards of fire and explosion; * * *</p>
<p>To comply with this collection of information, employers must purchase and post safety signs</p>	

ELECTRIC POWER GENERATION, TRANSMISSION, AND DISTRIBUTION  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926 Subpart  
V AND 29 CFR 1910.269) AND THE ELECTRICAL PROTECTIVE EQUIPMENT  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926.97 AND  
29 CFR 1910.137)  
1218-0253  
June 2017

Section	Standard Text
	<p>that meet the specifications in §1910.145.</p> <p>Employers use this collection of information to warn employees against entering areas where flammable liquids, vapors, or gases or combustible dusts might be present during chemical cleaning of boilers or pressure vessels. The Agency does not use this collection of information for its own purposes, except in enforcing this and other provisions of the standard.</p> <p><b>Note:</b> It is usual and customary for affected employers engaged in electric power generation, transmission, and distribution work to engage in this collection of information, as reflected in the EEI/IBEW draft standard that formed the basis of a substantial number of requirements in existing §1910.269. Therefore, OSHA concludes that there is no burden associated with this information collection. Consequently, the burden-hour calculations presented under Item 12 include no burden for this provision.</p>
<p>§1910.269(v)(8)(i)</p>	<p>(8) <i>Chlorine systems.</i> (i) Chlorine system enclosures shall be posted with signs restricting entry and warning of the hazard to health and the hazards of fire and explosion.</p> <p><b>Note to paragraph (v)(8)(i) of this section:</b> See Subpart Z of this part for requirements necessary to protect the health of employees from the effects of chlorine.</p>
	<p>To comply with this collection of information, employers must purchase and post safety signs that meet the specifications in §1910.145.</p> <p>Employers use this collection of information to warn employees against entering areas where chlorine might be present and to warn employees of the health, fire, and explosion hazards present in those areas. The Agency does not use this collection of information for its own purposes, except in enforcing this and other provisions of the standard.</p> <p><b>Note:</b> It is usual and customary for affected employers engaged in electric power generation, transmission, and distribution work to engage in this collection of information, as reflected in the EEI/IBEW draft standard that formed the basis of a substantial number of requirements in existing §1910.269. Therefore, OSHA concludes that there is no burden associated with this information collection. Consequently, the burden-hour calculations presented under Item 12 include no burden for this provision.</p>
<p>§1910.269(v)(10)(i)</p>	<p>(10) <i>Turbine generators.</i> (i) Smoking and other ignition sources are prohibited near hydrogen or hydrogen sealing systems, and signs warning of the danger of explosion and fire shall be posted.</p>
	<p>To comply with this collection of information, employers must purchase and post safety signs</p>

ELECTRIC POWER GENERATION, TRANSMISSION, AND DISTRIBUTION  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926 Subpart  
V AND 29 CFR 1910.269) AND THE ELECTRICAL PROTECTIVE EQUIPMENT  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926.97 AND  
29 CFR 1910.137)  
1218-0253  
June 2017

Section	Standard Text
	<p>that meet the specifications in §1910.145.</p> <p>Employers use this collection of information to warn employees of the fire and explosion hazards that will be present in areas near hydrogen or hydrogen sealing systems. The Agency does not use this collection of information for its own purposes, except in enforcing this and other provisions of the standard.</p> <p><b>Note:</b> It is usual and customary for affected employers engaged in electric power generation, transmission, and distribution work to engage in this collection of information, as reflected in the EEI/IBEW draft standard that formed the basis of a substantial number of requirements in existing §1910.269. Therefore, OSHA concludes that there is no burden associated with this information collection. Consequently, the burden-hour calculations presented under Item 12 include no burden for this provision.</p>
<p>§1910.269(v)(11)(ii),  (v)(11)(ix), and (v)(11)  (x)</p>	<p>(11) <i>Coal and ash handling.</i> * * *</p> <p>(ii) Before a locomotive or locomotive crane is moved, a warning shall be given to employees in the area.</p> <p style="text-align: center;">* * *</p> <p>(ix) A conveyor that could cause injury when started may not be started until personnel in the area are alerted by a signal or by a designated person that the conveyor is about to start.</p> <p>(x) If a conveyor that could cause injury when started is automatically controlled or is controlled from a remote location, an audible device shall be provided that sounds an alarm that will be recognized by each employee as a warning that the conveyor will start and that can be clearly heard at all points along the conveyor where personnel may be present. The warning device shall be actuated by the device starting the conveyor and shall continue for a period of time before the conveyor starts that is long enough to allow employees to move clear of the conveyor system. A visual warning may be used in place of the audible device if the employer can demonstrate that it will provide an equally effective warning in the particular circumstances involved.</p> <p><i>Exception:</i> If the employer can demonstrate that the system's function would be seriously hindered by the required time delay, warning signs may be provided in place of the audible warning device. If the system was installed before January 31, 1995, warning signs may be provided in place of the audible warning device until such time as the conveyor or its control system is rebuilt or rewired. These</p>

ELECTRIC POWER GENERATION, TRANSMISSION, AND DISTRIBUTION  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926 Subpart  
V AND 29 CFR 1910.269) AND THE ELECTRICAL PROTECTIVE EQUIPMENT  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926.97 AND  
29 CFR 1910.137)

1218-0253

June 2017

Section	Standard Text
	<p>warning signs shall be clear, concise, and legible and shall indicate that conveyors and allied equipment may be started at any time, that danger exists, and that personnel must keep clear. These warning signs shall be provided along the conveyor at areas not guarded by position or location.</p>
	<p>Employers assign employees to issue a warning, typically by sounding an air horn or similar alarm, or use automatic audible or visual signals, or both, before moving locomotives, locomotive cranes, or conveyors that could injure employees.</p> <p>Employers use this collection of information to warn employees against the movement of locomotives, locomotive cranes, and conveyors so that the employees will keep out of dangerous areas and avoid being struck. The Agency does not use this collection of information for its own purposes, except in enforcing this and other provisions of the standard.</p> <p><b>Note:</b> It is usual and customary for affected employers engaged in electric power generation, transmission, and distribution work to engage in this collection of information, as reflected in the EEI/IBEW draft standard that formed the basis of a substantial number of requirements in existing §1910.269. Therefore, OSHA concludes that there is no burden associated with this information collection. Consequently, the burden-hour calculations presented under Item 12 include no burden for this provision.</p>
<p>§1910.269(v)(12)</p>	<p>(12) <i>Hydroplants and equipment.</i> Employees working on or close to water gates, valves, intakes, forebays, flumes, or other locations where increased or decreased water flow or levels may pose a significant hazard shall be warned and shall vacate such dangerous areas before water flow changes are made.</p>
	<p>Employers use this collection of information to warn employees working close to water gates, valves, intakes, forebays, flumes, or similar hazardous locations before making water flow changes. Employers typically issue these warnings by sounding an air horn or similar alarm, or via radio. The Agency does not use these collections of information for its own purposes, except in enforcing this and other provisions of the standard.</p> <p><b>Note:</b> It is usual and customary for affected employers engaged in electric power generation, transmission, and distribution work to engage in this collection of information, as reflected in the EEI/IBEW draft standard that formed the basis of a substantial number of requirements in existing §1910.269. Therefore, OSHA concludes that there is no burden associated with this information collection. Consequently, the burden-hour calculations presented under Item 12 include no burden for this provision.</p>

ELECTRIC POWER GENERATION, TRANSMISSION, AND DISTRIBUTION  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926 Subpart  
V AND 29 CFR 1910.269) AND THE ELECTRICAL PROTECTIVE EQUIPMENT  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926.97 AND  
29 CFR 1910.137)  
1218-0253  
June 2017

In addition to the information collection requirements listed here, 29 CFR 1910.269 and 29 CFR Part 1926, Subpart V, incorporate by reference other standards that have information collection requirements:

Provision in §1910.269 or Subpart V	Incorporated Standard with Existing Information Collection Requirement	OMB Control Number for Existing Information Collection Requirement
§1926.953(a) and (g)	§1910.146	1218-0203
§1910.269(f)	29 CFR Part 1926, Subpart P	1218-0137

OSHA will reference §1926.953(a) and (g) in the ICR for Permit Required Confined Spaces (29 CFR 1910.146), OMB Control Number 1218-0203, and reference §1910.269(f) in the ICR for Excavations (29 CFR 1926, Subpart P), OMB Control Number 1218-0137, when requesting an extension for those ICRs. For the following reasons, OSHA takes no additional burden in this present ICR in conjunction with these collections of information.

First, any additional burden associated with complying with the collections of information in 29 CFR 1926.953 (a) and (g) will be negligible. The construction standards define an enclosed space, in 29 CFR 1926.968, as a “working space, such as a manhole, vault, tunnel, or shaft, that has a limited means of egress or entry, that is designed for periodic employee entry under normal operating conditions, and that, under normal conditions, does not contain a hazardous atmosphere, but may contain a hazardous atmosphere under abnormal conditions.” OSHA believes that, in nearly every case, employees entering an enclosed space that contains a hazardous atmosphere, requiring entry under §1910.146, will be performing work to clean the space to return it to its normal enclosed-space condition. This work is maintenance, and not construction work.

Second, any additional burden associated with complying with the collections of information in 29 CFR 1910.269(f) will be negligible. While 29 CFR 1910.269(f) applies to general industry work, the vast majority of work involving the collections of information in 29 CFR 1926, Subpart P, is construction work.

**3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses, and the basis for the decision for adopting this means of collection. Also describe any consideration of using information technology to reduce burden.**

The Agency generally wrote the paperwork requirements of the construction and general industry standards in performance-oriented language (i.e., in terms of what data to collect, not how to record the data). As such, in appropriate cases, employers may comply by using data-



ELECTRIC POWER GENERATION, TRANSMISSION, AND DISTRIBUTION  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926 Subpart  
V AND 29 CFR 1910.269) AND THE ELECTRICAL PROTECTIVE EQUIPMENT  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926.97 AND  
29 CFR 1910.137)

1218-0253

June 2017

processing programs, which permit easier access to collected information during OSHA inspections. The paperwork requirements also permit the storage of collected information at locations other than the place of inspection if the employer can deliver the data quickly to the place of inspection (i.e., delivery via e-mail, telefax, or other electronic data-transfer method).

**4. Describe efforts to identify duplication. Show specifically why any similar information already available cannot be used or modified for use for the purpose(s) described in 2 above.**

The collections of information in this ICR eliminate duplication of effort by employers by ensuring that requirements applicable to construction work are consistent with existing requirements applicable to general industry work, which are more up-to-date than the existing construction standards. The information required by these collections of information is available only from employers. At this time, there is no indication that any alternate source is available.

**5. If the collection of information impacts small businesses or other small entities, describe the methods used to reduce the burden.**

OSHA evaluated many alternatives to the standards to ensure that the requirements will best accomplish the stated objectives of applicable statutes and minimize any significant economic impact of the rule on small entities. In developing the standards, and especially in establishing compliance, reporting requirements, or timetables that affect small entities, OSHA took the resources available to small entities into account. To the extent practicable, OSHA clarified, consolidated, and simplified compliance and reporting requirements specified by the standards that are applicable to small entities. Wherever possible, OSHA stated a standard's requirements in terms of performance rather than design specifications. OSHA did not consider an exemption from coverage of the rule for small entities to be a viable option because such an exemption would unduly jeopardize the safety and health of the affected employees.

**6. Describe the consequence to Federal program or policy activities if the collection is not conducted or is conducted less frequently, as well as any technical or legal obstacles to reducing the burden.**

The Agency believes that the information collection frequencies required by the standards are the minimum frequencies necessary to effectively regulate the electrical hazards posed to the affected workforce, and thereby fulfill its mandate "to assure so far as possible every working man and woman in the Nation safe and healthful working conditions and to preserve our human resources" as specified in the Act at 29 U.S.C. 651(b).

**7. Explain any special circumstances that would cause an information collection to be conducted in a manner:**

ELECTRIC POWER GENERATION, TRANSMISSION, AND DISTRIBUTION  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926 Subpart  
V AND 29 CFR 1910.269) AND THE ELECTRICAL PROTECTIVE EQUIPMENT  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926.97 AND  
29 CFR 1910.137)

1218-0253

June 2017

- **requiring respondents to report information to the agency more often than quarterly;**
- **requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it;**
- **requiring respondents to submit more than an original and two copies of any document;**
- **requiring respondents to retain records, other than health, medical, government contract, grant-in aid, or tax records, for more than three years;**
- **in connection with a statistical survey, that is not designed to produce valid and reliable results that can be generalized to the universe of study;**
- **requiring the use of a statistical data classification that has not been reviewed and approved by OMB;**
- **that includes a pledge of confidentiality that is not supported by authority established in statute or regulation, that is not supported by disclosure and data security policies that are consistent with the pledge, or which unnecessarily impedes sharing of data with other agencies for compatible confidential use; or**
- **requiring respondents to submit proprietary trade secret, or other confidential information unless the agency can prove that it has instituted procedures to protect the information's confidentiality to the extent permitted by law.**

No special circumstances exist that require employers to collect information using the procedures specified by this item.

**8. If applicable, provide a copy and identify the date and page number of publication in the Federal Register of the agency's notice, required by 5 CFR 1320.8(d), soliciting comments on the information collection before submission to OMB. Summarize public comments received in response to that notice and describe actions taken by the agency in response to those comments. Specifically address comments received on cost and hour burdens.**

**Describe efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported.**

**Consultation with representatives of those from whom information is to be obtained or those who must compile records should occur at least once every 3 years -- even if the collection of information activity is the same as in prior periods. There may be circumstances that may preclude consultation in a specific situation. These circumstances should be explained.**

As required by the Paperwork Reduction Act of 1995 (44 U.S.C. 3506(c)(2)(A)), OSHA published a notice in the *Federal Register* (82FR16627) on April 5, 2017 requesting public comment on its proposal to extend this information collection request to Office of Management and Budget's for the approval of the collection of information requirements contained in the

ELECTRIC POWER GENERATION, TRANSMISSION, AND DISTRIBUTION  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926 Subpart  
V AND 29 CFR 1910.269) AND THE ELECTRICAL PROTECTIVE EQUIPMENT  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926.97 AND  
29 CFR 1910.137)

1218-0253

June 2017

Standards on Electrical Protective Equipment (29 CFR 1910.137) and Electric Power Generation, Transmission, and Distribution (29 CFR 1910.269) under docket number OSHA-2017-0005. This notice is part of a preclearance consultation program that provides the general public and government agencies with an opportunity to comment on OSHA's request for an extension by the Office of Management and Budget (OMB) of a previous approval for the information collection requirements found in the standards. The Agency received no comments in response to this notice.

**9. Explain any decision to provide any payments or gift to respondents, other than remuneration of contractors or grantees.**

The Agency will not provide payments or gifts to the respondents.

**10. Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy.**

None of the paperwork requirements in the final standards requires the collection of confidential information, and there are no assurances of confidentiality.

**11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private. This justification should include the reasons why the agency considers the questions necessary, the specific uses to be made of the information, the explanation to be given to persons from whom the information is requested, and any steps to be taken to obtain their consent.**

None of the collections of information in these provisions involve sensitive information.

ELECTRIC POWER GENERATION, TRANSMISSION, AND DISTRIBUTION  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926 Subpart  
V AND 29 CFR 1910.269) AND THE ELECTRICAL PROTECTIVE EQUIPMENT  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926.97 AND  
29 CFR 1910.137)  
1218-0253  
June 2017

**12. Provide estimates of the hour burden of the collection of information. The statement should:**

- **Indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated. Unless directed to do so, agencies should not conduct special surveys to obtain information on which to base hour burden estimates. Consultation with a sample (fewer than 10) of potential respondents is desirable. If the hour burden on respondents is expected to vary widely because of differences in activity, size, or complexity, show the range of estimated hour burden, and explain the reasons for the variance. Generally, estimates should not include burden hours for customary and usual business practices.**
- **If this request for approval covers more than one form, provide separate hour burden estimates for each form and aggregate the hour burdens in Item 13 of OMB Form 83-1.**
- **Provide estimates of annualized cost to respondents for the hour burdens for collections of information, identifying and using appropriate wage-rate categories. The cost of contracting out or paying outside parties for information collection activities should not be included here. Instead, this cost should be included in Item 13.**

### **Burden-Hour and Cost Determinations**

OSHA provides estimates of burden hours and annualized costs for the information collection requirements in the following paragraphs of this item. The Agency based these estimates on data from the final economic analysis (FEA) prepared for the final rule, and on OSHA's estimate of the time it takes to comply with the collections of information. The information collection requirements affect establishments in a variety of different industries. The requirements primarily affect establishments that construct, operate, maintain, or repair electric power generation, transmission, or distribution systems. These establishments include electric utilities, as well as contractors hired by utilities and primarily classified in the construction industry. In addition, affected establishments appear in a variety of manufacturing and other industries that own or operate their own electric power generation, transmission, or distribution systems as a secondary part of their business operations. The requirements also affect establishments performing line-clearance tree-trimming operations.<sup>10</sup>

Table A summarizes the wage rates used in this analysis. The wages for this ICR are estimated using BLS' Occupational Employment Statistics (OES) data for 2016<sup>11</sup> (national statistics for all

---

<sup>10</sup>The information collection requirements in §§1910.137 and 1926.97 affect employers in a broader range of industries than §1910.269 and 29 CFR Part 1926, Subpart V. However, as noted earlier, the collections of information required in those sections are usual and customary practices of affected employers. Therefore, this section does not include burden estimates for those provisions. This section also does not include burden estimates for the information collection requirements in §1910.269 or 29 CFR Part 1926, Subpart V, where OSHA concluded that engaging in a collection of information is a usual and customary practice.

<sup>11</sup> Bureau of Labor Statistics, Occupational Employment Statistics, May 2016  
[http://www.bls.gov/oes/current/oes\\_nat.htm](http://www.bls.gov/oes/current/oes_nat.htm) , released March 30, 2017.

ELECTRIC POWER GENERATION, TRANSMISSION, AND DISTRIBUTION  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926 Subpart  
V AND 29 CFR 1910.269) AND THE ELECTRICAL PROTECTIVE EQUIPMENT  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926.97 AND  
29 CFR 1910.137)  
1218-0253  
June 2017

industries for the SOC codes shown in the table) and loaded using fringe rate data from BLS' Employer Costs for Employee Compensation (ECEC) for March 2017, released June 2017.<sup>12</sup> Whereas the 2014 ICR used different wages for different NAICS, the occupational wages here have been simplified and are not also NAICS-specific.

**Table A—Wage Rates for Affected Employees**

Labor Category	SOC	Median Hourly Wage [a]	Fringe % Total [b]	Loaded Hourly Wage [c = a ÷ (1 - b)]
Supervisor	49-1011	\$32.08	31.7%	\$46.97
Clerical	43-0000	\$17.91	31.7%	\$26.22
Electric Power Worker	49-9051	\$32.29	31.7%	\$47.28
Utility Engineer	17-2112	\$42.56	31.7%	\$62.31

Sources:

[a] Occupational Employment Statistics, national rates for all industries, May 2016.

[b] Private sector fringe from BLS (2017b) Employee Costs for Employee Compensation - March 2017.

Estimates of the burden hours and annual costs for each information collection requirement are shown below. Costs were tabulated by multiplying the burden hours by the average year December 2016 compensation rate<sup>13</sup>, which includes the fringe benefits computed at 31.6 percent of the Standard Occupational Classification (SOC). The mean hourly wage for this SOC can be found in the *May 2016 National Occupational Employment and Wage Estimates, Installation, Maintenance, and Repair Occupations*.

**§§1910.269(a)(3)(i) and 1926.950(c)(1)**

Table B shows the annual burden hours and cost for host employers to comply with the information collection requirements in §§1910.269(a)(3)(i) and 1926.950(c)(1). OSHA estimates that supervisors employed by small employers (i.e., employers with fewer than 20 employees) will take an average of 10 minutes (0.17 hours) per affected project, and that supervisors of large employers (i.e., employers with 20 or more employees) will take an average of 15 minutes (0.25 hours) per affected project, to collect and provide the required information.

<sup>12</sup> <https://www.bls.gov/news.release/pdf/ecec.pdf>

<sup>13</sup> Source: [https://www.bls.gov/news.release/archives/ecec\\_12082016.htm](https://www.bls.gov/news.release/archives/ecec_12082016.htm), Employer Costs for Employee Compensation, March 2017. Released Thursday, June 2017.

ELECTRIC POWER GENERATION, TRANSMISSION, AND DISTRIBUTION  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926 Subpart  
V AND 29 CFR 1910.269) AND THE ELECTRICAL PROTECTIVE EQUIPMENT  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926.97 AND  
29 CFR 1910.137)  
1218-0253  
June 2017

The number of projects from the final rule/2014 ICR was updated using the establishment growth rate in the Heavy and Civil Engineering Construction (NAICS 237) and Specialty Trade Contractors (NAICS 238) industries between 2007 and 2014, using U.S. Census Bureau (2009, 2016a) County Business Patterns data, where there was a negative 19.1 percent establishment growth rate. Wages were updated using BLS' Occupational Employment Statistics (OES) data for 2016 and BLS' Employer Costs for Employee Compensation (ECEC) for March 2017 (see Table A).

**Table B—Annual Burden Hours and Cost for Host Employers to Collect and Provide Required Information\***

Industry Name	Affected Projects	Briefing Time	Burden Hours	Wage Rate for Supervisors	Cost for Supervisors
<b>Electric Power Generation</b>					
Small	67,561	0.17	11,485	\$46.97	\$539,451
Large	108,280	0.25	27,070	\$46.97	\$1,271,478
<b>Electric Power Transmission, Control, and Distribution</b>					
Small	180,173	0.17	30,629	\$46.97	\$1,438,644
Large	288,763	0.25	72,191	\$46.97	\$3,390,811
<b>Major Publicly Owned Utilities</b>					
Small	16,108	0.17	2,738	\$46.97	\$128,604
Large	25,816	0.25	6,454	\$46.97	\$303,144
<b>Industrial Power Generators</b>					
Small	NA	NA	NA	NA	NA
Large	67,336	0.25	16,834	\$46.97	\$790,693
<b>Total</b>					
<b>Total</b>	<b>754,037</b>	<b>—</b>	<b>167,401</b>	<b>—</b>	<b>\$7,862,825</b>

\*This is a conservative estimate for paperwork purposes. Note that the wage rate decreased because we are no longer using the NAICS-specific wage rate for utility supervisors, but just the overall supervisor rate for all industries.

**§§1910.269(a)(3)(ii) and 1926.950(c)(2)**

Table C shows the annual burden hours and cost for contract employers to comply with the information collection requirements in §§1910.269(a)(3)(ii) and 1926.950(c)(2). OSHA estimates that supervisors employed by small employers (i.e., employers with fewer than 20 employees) will take an average of 10 minutes (0.17 hours) per affected project, and that supervisors of large employers (i.e., employers with 20 or more employees) will take an average of 15 minutes (0.25 hours) per affected project, to collect and provide the required information.

ELECTRIC POWER GENERATION, TRANSMISSION, AND DISTRIBUTION  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926 Subpart  
V AND 29 CFR 1910.269) AND THE ELECTRICAL PROTECTIVE EQUIPMENT  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926.97 AND  
29 CFR 1910.137)  
1218-0253  
June 2017

**Table C—Annual Burden Hours and Cost for Contract Employers to Collect and Provide  
Required Information\***

Industry Name	Affected Projects	Briefing Time	Burden Hours	Wage Rate for Supervisors	Cost for Supervisors
<b>Water, Sewer, and Pipeline Construction</b>					
Small	5,055	0.17	859	\$46.97	\$40,347
Large	8,107	0.25	2,027	\$46.97	\$95,208
<b>Power and Communication Transmission Line Construction</b>					
Small	71,970	0.17	12,235	\$46.97	\$574,678
Large	96,538	0.25	24,135	\$46.97	\$1,133,621
<b>Industrial Nonbuilding Structure Construction</b>					
Small	447	0.17	76	\$46.97	\$3,570
Large	15,332	0.25	3,833	\$46.97	\$180,036
<b>All Other Heavy Construction</b>					
Small	41,421	0.17	7,042	\$46.97	\$330,763
Large	41,611	0.25	10,403	\$46.97	\$488,629
<b>Electrical Contractors</b>					
Small	138,957	0.17	23,623	\$46.97	\$1,109,572
Large	113,270	0.25	28,318	\$46.97	\$1,330,096
<b>Structural Steel Erection Contractors</b>					
Small	1,812	0.17	308	\$46.97	\$14,468
Large	2,449	0.25	612	\$46.97	\$28,746
<b>Building Equipment and Other Machine Installation Contractors</b>					
Small	1,700	0.17	289	\$46.97	\$13,574
Large	2,292	0.25	573	\$46.97	\$26,914
<b>All Other Special Trade Contractors</b>					
Small	8,946	0.17	1,521	\$46.97	\$71,441
Large	3,735	0.25	934	\$46.97	\$43,870
<b>Ornamental Shrub and Tree Services</b>					
Small	19,406	0.17	3,299	\$46.97	\$154,954
Large	180,989	0.25	45,247	\$46.97	\$2,125,252
<b>Total</b>					
<b>Total</b>	<b>754,037</b>	<b>—</b>	<b>165,334</b>	<b>—</b>	<b>\$7,765,738</b>

\*This is a conservative estimate for paperwork purposes. See Table 30 of the FEA for the final rule.

§§1910.269(c)(1)(i) and 1926.952(a)(1)

Table D shows the annual burden hours and cost for a supervisor to provide the employee with information required under §§1910.269(c)(1)(i) and 1926.952(a)(1) so that the employee can conduct a job briefing. OSHA estimates that the supervisors in the affected industries will take

ELECTRIC POWER GENERATION, TRANSMISSION, AND DISTRIBUTION  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926 Subpart  
V AND 29 CFR 1910.269) AND THE ELECTRICAL PROTECTIVE EQUIPMENT  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926.97 AND  
29 CFR 1910.137)  
1218-0253  
June 2017

an average of 5 minutes (0.08 hours) per affected project to comply with the collection of information.<sup>14</sup>

The number of projects from the final rule/2014 ICR was updated using the establishment growth rate in the Heavy and Civil Engineering Construction (NAICS 237) and Specialty Trade Contractors (NAICS 238) industries between 2007 and 2014, using U.S. Census Bureau (2009, 2016a) County Business Patterns data, where there was a negative 19.1 percent establishment growth rate. Wages were updated using BLS' Occupational Employment Statistics (OES) data for 2016 and BLS' Employer Costs for Employee Compensation (ECEC) for March 2017 (see Table A).

**Table D—Annual Burden Hours and Cost for Job Briefing**

Industry Name	No. of Projects	Average Compliance Rate (%)	Average Not in Compliance (%)	Affected Projects	Briefing Time	Burden Hours	Wage Rate for Supervisors	Cost for Supervisors
<b>Water, Sewer, and Pipeline Construction</b>								
Small	20,218	85%	15%	3,033	0.08	243	\$46.97	\$11,414
Large	32,430	95%	5%	1,621	0.08	130	\$46.97	\$6106
<b>Power and Communication Transmission Line Construction</b>								
Small	411,256	85%	15%	61,688	0.08	4,935	\$46.97	\$231,797
Large	965,384	95%	5%	48,269	0.08	3,862	\$46.97	\$181,398
<b>Industrial Nonbuilding Structure Construction</b>								
Small	1,789	85%	15%	268	0.08	21	\$46.97	\$986
Large	61,326	95%	5%	3,066	0.08	245	\$46.97	\$ 11,508
<b>All Other Heavy Construction</b>								
Small	165,683	85%	15%	24,853	0.08	1,988	\$46.97	\$93,376
Large	166,444	95%	5%	8,322	0.08	666	\$46.97	\$31,282
<b>Electrical Contractors</b>								
Small	555,827	85%	15%	83,374	0.08	6,670	\$46.97	\$313,290
Large	453,080	95%	5%	22,654	0.08	1,812	\$46.97	\$85,110
<b>Structural Steel Erection Contractors</b>								
Small	7,246	85%	15%	1,087	0.08	87	\$46.97	\$4,086
Large	9,796	95%	5%	490	0.08	39	\$46.97	\$1,832
<b>Building Equipment and Other Machine Installation Contractors</b>								
Small	6,799	85%	15%	1,020	0.08	82	\$46.97	\$3,852
Large	9,170	95%	5%	458	0.08	37	\$46.97	\$1,738

<sup>14</sup>In the FEA, OSHA estimated the costs of compliance associated with the final job-briefing requirement to involve resources (including labor costs or other expenditures) equivalent to 5 minutes of supervisory time for each employee on each affected project. The burden hours in Table D reflect costs associated with supervisory time only.



ELECTRIC POWER GENERATION, TRANSMISSION, AND DISTRIBUTION  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926 Subpart  
V AND 29 CFR 1910.269) AND THE ELECTRICAL PROTECTIVE EQUIPMENT  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926.97 AND  
29 CFR 1910.137)  
1218-0253  
June 2017

<b>All Other Special Trade Contractors</b>								
Small	35,785	85%	15%	5,368	0.08	429	\$46.97	\$20,150
Large	14,940	95%	5%	747	0.08	60	\$46.97	\$2,818
<b>Electric Power Generation</b>								
Small	27,547	95%	5%	1,377	0.08	110	\$46.97	\$5,166
Large	1,252,311	98%	2%	25,046	0.08	2,004	\$46.97	\$94,128
<b>Electric Power Transmission, Control, and Distribution</b>								
Small	25,367	95%	5%	1,268	0.08	101	\$46.97	\$4,744
Large	2,150,685	98%	2%	43,014	0.08	3,441	\$46.97	\$161,624
<b>Major Publicly Owned Utilities</b>								
Small	5,326	95%	5%	266	0.08	21	\$46.97	\$986
Large	286,617	98%	2%	5,732	0.08	459	\$46.97	\$21,559
<b>Industrial Power Generators</b>								
Small	NA	NA	NA	NA	NA	NA	NA	NA
Large	585,570	98%	2%	11,711	0.08	937	\$46.97	\$44,010
<b>Ornamental Shrub and Tree Services</b>								
Small	77,625	85%	15%	11,644	0.08	932	\$46.97	\$43,776
Large	723,957	95%	5%	36,198	0.08	2,896	\$46.97	\$136,025
<b>Total</b>								
<b>Total</b>	<b>8,052,178</b>	<b>—</b>	<b>—</b>	<b>402,574</b>	<b>—</b>	<b>32,207</b>	<b>—</b>	<b>\$1,512,763</b>

**§§1910.269(l)(3)(ii) and 1926.960(c)(1)(ii)<sup>15</sup>**

Table E shows the one-time burden hours and annualized cost to perform engineering analyses to determine maximum anticipated per-unit transient overvoltage in accordance with §§1910.269(l)(3)(ii) and 1926.960(c)(1)(ii). OSHA estimates that only 143 utilities in the Electric Power Transmission, Control, and Distribution, and Major Publicly Owned Utilities industries will have to perform engineering analyses under §§1910.269(l)(3)(ii) and 1926.960(c)(1)(ii). Finally,

<sup>15</sup> Until **January 31, 2018**, for voltages of 169.1 kilovolts and more: (i) no citations will be issued under 29 CFR 1910.269(l)(3)(ii) or 29 CFR 1926.960(c)(1)(ii), which require the employer to determine the maximum anticipated per-unit transient overvoltage; and (ii) OSHA will accept compliance with the minimum approach distances in Table 6 or Tables 10 to 13 in Appendix B to 29 CFR 1910.269 as compliance with 29 CFR 1910.269(l)(3)(i) and 29 CFR 1926.960(c)(1)(i). If peer-reviewed guidance regarding the calculation of maximum transient overvoltage is not available before **May 1, 2017**, OSHA will extend this policy as necessary to give employers time to read and implement such guidance when it becomes available.

Until **January 31, 2018**, for voltages of 72.6 to 169.0 kilovolts, no citations will be issued under 29 CFR 1910.269(l)(3)(ii) or 29 CFR 1926.960(c)(1)(ii), which require the employer to determine the maximum anticipated per-unit transient overvoltage, provided the employer assumes a maximum anticipated per-unit transient overvoltage, phase-to-ground, of 3.0 per unit. If peer-reviewed guidance regarding the calculation of maximum transient overvoltage is not available before **May 1, 2017**, OSHA will extend this policy as necessary to give employers time to read and implement such guidance when it becomes available.

ELECTRIC POWER GENERATION, TRANSMISSION, AND DISTRIBUTION  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926 Subpart  
V AND 29 CFR 1910.269) AND THE ELECTRICAL PROTECTIVE EQUIPMENT  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926.97 AND  
29 CFR 1910.137)  
1218-0253  
June 2017

based on the FEA, OSHA estimates 48 percent of these utilities are large employers and 52 percent of these utilities are small employers, and that it will take an engineer 4 hours for small employers, and 8 hours for large employers, to prepare an engineering analysis and the associated documentation.

The number of utilities with costs to perform the engineering analysis to calculate the minimum approach distance (MAD) in the final rule was based on EIA and FERC data on the number of utilities performing electricity transmission that have high voltage lines. This was a one-time cost that applied to existing utilities at the time of the final rule. For this ICR update, we estimate the number of new utilities that would have to perform the engineering analysis each year using U.S. Census Bureau (2016b) Business Dynamics Statistics,<sup>16</sup> which characterize entry/exit patterns for establishments in the U.S. classified according to the size and age of the firm with which they are associated. Taking the average of the establishment entry rate for the last decade (2004 through 2014) for the Transportation, Communication, and Public Utilities sector results in an average entry rate of 12.1 percent.<sup>17</sup> This percentage is multiplied by the number of utilities affected in the final rule in order to estimate the number of new utilities affected each year. Wages were updated using BLS' Occupational Employment Statistics (OES) data for 2016 and BLS' Employer Costs for Employee Compensation (ECEC) for March 2017 (see Table A).

**Table E—One-Time Burden Hours and Annualized Cost for Establishment to Perform Engineering Analyses to Determine Maximum Anticipated Per-Unit Transient Overvoltage**

Industry Name	No. Utilities, Rule	Annual % New	No. Utilities per Year	Engineering Time (Hours)	Burden Hours	Wage Rate for Utility Engineers	Annual Cost for Utility Engineers
<b>Electric Power Transmission, Control, and Distribution &amp; Major Publicly Owned Utilities</b>							
Small	74	12.1%	9	4	36	\$62.31	\$2,243
Large	69	12.1%	8	8	64	\$62.31	\$3,988
<b>Total</b>	<b>143</b>	—	<b>17</b>	—	<b>100</b>	—	<b>6,231</b>

<sup>16</sup> Source: U.S. Census Bureau, Business Dynamics Statistics, <http://www.census.gov/ces/dataproducts/bds/data.html>, released September 2016.

<sup>17</sup> The Agency believes the estimated percentage of new electric utilities created annually, falling under this requirement, is overestimated using this broad sector average. As high voltage lines are highly capital intensive, the Agency anticipates more industry-specific data would indicate slower turnover. In addition, the effective date of this requirement has been delayed.

ELECTRIC POWER GENERATION, TRANSMISSION, AND DISTRIBUTION  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926 Subpart  
V AND 29 CFR 1910.269) AND THE ELECTRICAL PROTECTIVE EQUIPMENT  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926.97 AND  
29 CFR 1910.137)  
1218-0253  
June 2017

Table F in addition to requiring employers to prepare the documentation for the engineering analyses, §§1910.269(l)(3)(ii) and 1926.960(c)(1)(ii) require employers to make any documentation for the engineering analysis available upon request to employees designee for examination and copying. With respect to the burden and cost of disclosing engineering analyses to employees, OSHA estimates that it takes 5 minutes (0.08 hour) for a supervisor to disclose the documentation for the engineering analysis to employees, and that one employee per year in each establishment affected by the final rule will request an engineering analysis. Therefore, OSHA estimates the annual burden hours and costs associated with making the engineering analysis available to employees as follows:

**Table F -- Disclosure of engineering analysis to employees**

NAICS	Affected Utilities	Establishments per Firm	Affected Establishments	Employee	Burden Hours per Employee	Total Burden Hours	Supervisor Wage	Cost
	<i>a</i>	<i>b</i>	<i>c = a x b</i>	<i>d</i>	<i>e</i>	<i>f = c x d x e</i>	<i>g</i>	<i>h = f x g</i>
Electric Power Transmission, Control, and Distribution	102	6	612	1	0.08	49	\$46.97	\$2,302
Major Publicly Owned Utilities	14	3	42	1	0.08	3	\$46.97	\$141
<b>Total</b>	<b>116</b>	<b>—</b>	<b>654</b>	<b>1</b>	<b>0.08</b>	<b>52</b>	<b>\$46.97</b>	<b>\$2,442</b>

**Annual Disclosure, During OSHA Inspections, of the Certifications, Documentation, and Records Required by the Information Collection Requirements**

Usually, OSHA requests access to records during an inspection. Information collected by the Agency during the investigation is not subject to the PRA under 5 CFR 1320.4(a)(2). Therefore, OSHA takes no burden or cost for OSHA requests to access records in this Supporting Statement.

ELECTRIC POWER GENERATION, TRANSMISSION, AND DISTRIBUTION  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926 Subpart  
V AND 29 CFR 1910.269) AND THE ELECTRICAL PROTECTIVE EQUIPMENT  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926.97 AND  
29 CFR 1910.137)

1218-0253

June 2017

**13. Provide an estimate of the total annual cost burden to respondents or recordkeepers resulting from the collection of information. (Do not include the cost of any hour burden shown in Items 12 and 14.)**

- **The cost estimate should be split into two components: (a) a total capital and start-up cost component annualized over its expected useful life) and (b) a total operation and maintenance and purchase of services component. The estimates should take into account costs associated with generating, maintaining, and disclosing or providing the information. Include descriptions of methods used to estimate major cost factors including system and technology acquisition, expected useful life of capital equipment, the discount rate(s), and the time period over which costs will be incurred. Capital and start-up costs include, among other items, preparations for collecting information such as purchasing computers and software; monitoring, sampling, drilling and testing equipment; and record storage facilities.**
- **If cost estimates are expected to vary widely, agencies should present ranges of cost burdens and explain the reasons for the variance. The cost of purchasing or contracting out information collection services should be a part of this cost burden estimate. In developing cost burden estimates, agencies may consult with a sample of respondent (fewer than 10), utilize the 60-day pre-OMB submission public comment process and use existing economic or regulatory impact analysis associated with the rulemaking containing the information collection, as appropriate.**
- **Generally, estimates should not include purchases of equipment or services, or portions thereof, made: (1) prior to October 1, 1995, (2) to achieve regulatory compliance with requirements not associated with the information collection, (3) for reasons other than to provide information or keep records for the government, or (4) as part of customary and usual business or private practices.**

Item 12 above provides the total cost of the information collection requirements specified by the Standard. Therefore, there is no cost to the respondent other than their time.

**14. Provide estimates of the annualized cost to the Federal Government. Also, provide a description of the method used to estimate cost, which should include quantification of hours, operational expenses (such as equipment, overhead, printing, and support staff), and any other expense that would not have been incurred without this collection of information. Agencies also may aggregate cost estimates from Items 12, 13, and 14 into a single table.**

Usually, OSHA requests access to records during an inspection. Information collected by the Agency during the investigation is not subject to the PRA under 5 CFR 1320.4(a)(2). Therefore, OSHA takes no burden or cost in Item 14 of this Supporting Statement for disclosing information during an inspection.

**15. Explain the reasons for any program changes or adjustments.**

The Agency is requesting a decrease of 86,997 burden hours from 452,091 hours to 365,094 hours. There was a decrease in the number of establishments and the number of projects affected. The number of establishments affected has declined by 4,661 establishments from 24,407 to 19,746 and the number of projects affected has declined by 178,024 projects from 932,061 to 754,037. Also, the decrease is due to the removal of burden hours associated with OSHA

ELECTRIC POWER GENERATION, TRANSMISSION, AND DISTRIBUTION  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926 Subpart  
V AND 29 CFR 1910.269) AND THE ELECTRICAL PROTECTIVE EQUIPMENT  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926.97 AND  
29 CFR 1910.137)

1218-0253

June 2017

requests to access records from employers. Usually, OSHA requests access to records during an inspection. Information collected by the Agency during the investigation is not subject to the PRA under 5 CFR 1320.4(a)(2). Therefore, OSHA takes no burden or cost for OSHA requests to access records in this Supporting Statement. Table G below summarizes the burden hours and costs described in Item 12.

<b>Table G —Summary of Electric Power Transmission and Distribution, and Electrical Protective Equipment Burden Hours</b>					
<b>Collection of Information (OMB Control Number)</b>	<b>Existing Burden Hours</b>	<b>Requested Burden Hours</b>	<b>Change</b>	<b>Responses</b>	<b>Reasons for program change or adjustment</b>
<b>The Electric Power Generation, Transmission, And Distribution Standards for Construction and General Industry (29 CFR 1926 Subpart V and 29 CFR 1910.269 and the Electrical Protective Standards for Construction and General Industry (29 CFR 1926.97 and 2 9 CFR 1910.137)</b>					
Host Employers to Collect and Provide Required Information §§ 1910.269(a)(3)(i) and 1926.950(c)(1) (Table B)	206,925	167,401	-39,524	754,037	The number of establishments affected has decreased.
Contract Employers to Collect and Provide Required Information § 1926.950(c)(2) and § 1910.269(a)(3)(ii) (Table C)	204,369	165,334	-39,035	165,334	The number of establishments affected has decreased.
Job Briefing § 1926.952(a)(1) and § 1910.269(c)(1)(i) (Table D)	39,810	32,207	-7,603	32,207	The number of establishments affected has decreased.
Engineering Analyses to Determine Maximum Anticipated Per-Unit Transient Overvoltage § 1926.960(c)(1)(ii) and §1910.269(l)(3)(ii) (Table E);	848	100	-748	116	The number of establishments affected has decreased.
Disclosure of engineering analysis (Table F)	65	52	-13	654	The number of establishments affected has decreased.
Disclosure, during OSHA inspections, of the certifications, documentation, and records required by the information collection requirements	74	0	-74	0	Usually, OSHA requests access to records during an inspection. Information collected by the Agency during the

ELECTRIC POWER GENERATION, TRANSMISSION, AND DISTRIBUTION  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926 Subpart  
V AND 29 CFR 1910.269) AND THE ELECTRICAL PROTECTIVE EQUIPMENT  
STANDARDS FOR CONSTRUCTION AND GENERAL INDUSTRY (29 CFR 1926.97 AND  
29 CFR 1910.137)

1218-0253

June 2017

					investigation is not subject to the PRA under 5 CFR 1320.4(a)(2). Therefore, OSHA takes no burden or cost for OSHA requests to access records in this Supporting Statement.
Totals	452,091	365,094	86,997	952,348	

**16. For collections of information whose results will be published, outline plans for tabulation and publication. Address any complex analytical techniques that will be used. Provide the time schedule for the entire project, including beginning and ending dates of the collection information, completion of report, publication dates, and other actions.**

OSHA will not publish the information collections included under this OMB control number.

**17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons that display would be inappropriate.**

OSHA lists current valid control numbers in §§1910.8, 1915.8, 1917.4, 1918.4, and 1926.5, and publishes the expiration date in a Federal Register notice announcing OMB approval of the information collection requirement. (See 5 CFR 1320.3(f)(3).) OSHA believes that this is the most appropriate and accurate mechanism to inform interested parties of these expiration dates.

**18. Explain each exception to the certification statement.**

OSHA is not seeking an exception to the certification statement.

**B. COLLECTION OF INFORMATION EMPLOYING STATISTICAL METHODS**

These collections of information employ no statistical methods.