SUPPORTING STATEMENT FOR THE INFORMATION COLLECTION REQUIREMENTS FOR THE ELECTRICAL STANDARDS FOR CONSTRUCTION (29 CFR PART 1926, SUBPART K) AND GENERAL INDUSTRY (29 CFR PART 1910, SUBPART S) OMB CONTROL NO. 1218-0130 (September 2024)

The agency is requesting the extension of a currently approved data collection.

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 (i.e., "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). To achieve this objective, the Act authorizes "the development and promulgation of occupational safety and health standards" (29 U.S.C. 651).

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 goes on to state that "[t]he Secretary, in consultation with the Secretary of Health and Human Services, may by rule promulgated pursuant to section 553 of title 5, United States Code, 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).

Under the authority granted by the Act, the Occupational Safety and Health Administration ("OSHA" or "the Agency") published the Electrical Standards for Construction (29 CFR Part 1926, Subpart K) and General Industry (29 CFR Part 1910, Subpart S); i.e., "the Standards"). The Standards address safety procedures for installation and maintenance of electric utilization equipment that prevent death and serious injuries among construction and general industry workers in the workplace caused by electrical hazards.

Electrical Standards for Construction (29 CFR PART 1926, Subpart K)
and General Industry (29 CFR PART 1910, Subpart S)
OMB Control Number: 1218-0130
Expiration Date: October 31, 2024

Construction--Part 1926, Subpart K[1]

• §1926.403--General requirements

Paragraph (h) requires legible markings on each disconnecting means for motors and appliances to indicate its purpose, unless located and arranged so the purpose is evident. Each service, feeder, and branch circuit must have legible markings at its disconnecting means or overcurrent device to indicate its purpose, unless located and arranged so the purpose is evident. These markings are to be of sufficient durability to withstand the environment involved.

Paragraph (i)(2)(iii) requires employers to mark entrances to rooms and other guarded locations containing exposed live parts with conspicuous warning signs forbidding unqualified persons from entering.

Paragraph (j)(2)(ii) requires that metal-enclosed switchgear, unit substations, transformers, pull boxes, connection boxes, and similar equipment have appropriate caution signs.

• §1926.404--Wiring design and protection.

Paragraph (b)(1)(iii)(A) requires construction employers who implement an assured-equipment grounding-conductor (AEGC) program that covers cord sets, non-permanent receptacles, and equipment connected by a cord and plug, to have a written description of the program, including the specific procedures adopted by the employer, and to make this written program available at the job site for review and copying by OSHA compliance officers and affected employees.

Under paragraphs (b)(1)(iii)(E), the employer must test all cord sets, receptacles that are not part of the permanent wiring of the building or structure, and cord- and plug-connected equipment that require grounding. Employers are to perform these tests before: first using the equipment; returning the equipment to service following repair; and using equipment after any incident that the employer reasonably suspects damaged the equipment. In addition, an employer must

---

1 The following provisions do not contain an information collection requirement because the employer does not develop, collect, or maintain the information specified by the provisions: §1926.403(g) Marking; 1926.404(f)(7)(iv)(C)(6); Equipment connected by cord and plug; 1926.405(g)(2)(ii) Identification, splices, and terminations-marking; 1926.405(j)(3)(iii) Appliances – rating; 1926.407(b)(2)(ii) Approved for the hazardous (classified) location – marking. Instead, the manufacturer provides the information on the equipment (i.e., it is usual and customary for employers to purchase equipment that have these markings). Similarly, the following provisions are not considered collections of information under 5 CFR 1320.3(c)(2) because the federal government supplies the information; therefore, : §§1926.404(e)(1)(vi)(C) Overcurrent protection; 1926.405(b)(3)(ii) Cabinets, boxes, and fittings.

conduct testing at least every three months, except for fixed cord sets and receptacles not exposed to damage, which employers must test at least every six months.

Paragraph (b)(1)(iii)(G) requires employers to record these tests, including the identity of each receptacle, cord set, and cord- and plug-in connected equipment that passed the test, and the previous testing date or interval covered by the last test. The employer is to maintain the records using logs, color-coding, or other effective means until replaced by the next record and make them available at the job site for inspection by OSHA compliance officers and affected employees.

Paragraph (d)(2)(ii) requires employers to post signs warning of high voltage when employees, other than qualified employees, may come in contact with energized live parts.

• **§1926.405--Wiring methods, components, and equipment for general use.**

Paragraph (h) requires marking each termination enclosure with a high-voltage hazard warning.

Paragraph (j)(4)(ii)(A) requires that employers mark controller-disconnecting means for motor-branch circuits over 600 volts, nominal, and that are out of sight of the controller, with a warning label giving the location and identification of the disconnecting means that is to be locked in the open position.

Paragraph (j)(5)(ii) requires employers to indicate the operation voltage of exposed live parts of transformer installations by using warning signs or visible markings on the equipment or structure.

Paragraph (j)(6)(ii)(A) requires that capacitors rated over 600 volts, nominal, have isolating or disconnecting switches (with no interrupting rating) that interlock with the load-interrupting device or have a prominently displayed caution sign to prevent switching load current.

• **§1926.408--Special systems.**

Paragraph (a)(2)(iii) requires that isolating means not designed to interrupt the load current of the circuit either be interlocked with an approved circuit interrupter or provided with a sign warning against opening them under load.

Paragraph (a)(3)(i) requires that a metallic enclosure provided on the mobile machine for enclosing the terminals of the power cable must have provision for locking so only authorized qualified persons may open it, and it must have a sign warning of the presence of energized parts.

Paragraph (a)(3)(ii) requires employers to enclose energized switching and control parts in effectively grounded and locked metal cabinets or enclosures that are accessible only to authorized qualified persons, and that have a sign warning of the presence of energized parts.

• **§1926.416--General requirements.**

Paragraph (a)(3) requires warning signs to alert employees to the presence of energized electric power circuits, and to advise them of the location of such lines, the hazards involved, and what protective measures to take.

• §1926.417--Lockout and tagging of circuits.

Paragraphs (a), (b), and (c) require employers to tag deactivated controls to energized or deenergized circuits and equipment while employees are working on them. In addition, employers are to render deenergized equipment and circuits inoperative, and attach tags at points that control the release of energy to the deenergized circuits and equipment. These tags must plainly identify these circuits and equipment.

General Industry-- Part 1910, Subpart S[2]

2 The following provisions do not contain an information collection requirement because the employer does not develop, collect, or maintain the information specified by the provisions: §§1910.303(e)(1)&(2) Marking – Identification of manufacturer and ratings & Durability; 1910.304(b)(2)(iv)(C)(2) Receptacles and cord connectors; 1910.304(b)(2)(iv)(C)(3) Receptacles and cord connectors; 1910.304(f)(1)(ix) Overcurrent protection – 600 volts, nominal, or less; 1910.304(g)(6)(vii)(B) Supports, enclosures, and equipment to be grounded; 1910.305(a)(3)(ii)(A) Cable trays; 1910.305(a)(3)(ii)(D) Cable trays; 1910.305(g)(2)(i) Identification, splices, and terminations; 1910.305(j)(3)(iii) Appliances; 1910.306(h)(3)(ii) Portable electric equipment; 1910.306(h)(4)(iii)(B) Power supply circuits and receptacles for portable electric equipment; 1910.307(c)(2)(ii)(A)-(E) Approved for the hazardous (classified) location; 1910.307(g)(5)(ii) Listing and marking; 1910.308(c)(2) Marking; 1910.308(d)(2)(ii) Power sources; 1910.308(d)(4) Identification. Instead, the manufacturer provides the information on the equipment (i.e., it is usual and customary for employers to purchase equipment that have these markings). Similarly, the following provisions are not considered collections of information under 5 CFR 1320.3(c)(2) because the federal government supplies the information: §§ 1910.303(h)(5)(iii)(B) Working space and guarding; 1910.304((f)(1)(viii) Overcurrent protection – 600 volts, nominal, or less; 1910.305(b)(3)(iii) Pull and junction boxes for systems over 600 volts, nominal; 1910.305(c)(3)(ii) Connection of switches; 1910.306(c)(8) Warning sign for multiple disconnecting means; 1910.306(g)(1)(iv) Guarding and grounding; 1910.308(a)(5)(iv) Interrupting and isolating devices; 1910.308(a)(5)(vi)(B) Interrupting and isolating devices.

• **§1910.303--General requirements**.

Paragraphs (f)(1) & (2) require legible markings on each disconnecting means for motors and appliances to indicate its purpose, unless located and arranged so the purpose is evident. Each service, feeder, and branch circuit, at its disconnecting means or overcurrent device, must have legible markings to indicate its purpose, unless located and arranged so the purpose is evident. These markings are to be of sufficient durability to withstand the environment involved.

Paragraph (f)(5)(i) and (ii) of this section requires the employer to mark in the indicated field the circuit breakers' and fuses' series combination ratings of the equipment given by the manufacturer. The wording shall state "Caution - Series Combination System Rated ____ Amperes. Identified Replacement Component Required." The employer has to legibly mark on the blank that rating.

Paragraph (g)(2)(iii) requires employers to mark entrances to rooms and other guarded locations containing exposed live parts with conspicuous warning signs forbidding unqualified persons to enter.

Paragraph (h)(2)(iii)(B) (previously §1910.303(h)(2)(ii)) requires that metal-enclosed switchgear, unit substations, transformers, pull boxes, connection boxes, and similar equipment have appropriate caution signs.

• **§1910.304--Wiring design and protection.**

Paragraph (b)(1) of this section requires the employer to identify the phase and system of each ungrounded conductor of a multiwire branch circuit in a building containing more than one nominal voltage system. This marking is required to be permanently posted on each panelboard.

Paragraph (b)(3)(ii)(C)(1) requires a written description of the [assured equipment grounding conductor (AEGC)] program, including the specific procedures adopted by the employer, shall be available at the jobsite for inspection and copying by the Assistant Secretary of Labor and any affected employee.

Paragraph (b)(3)(ii)(C)(6) requires tests performed as required in paragraph (b)(3)(ii)(C) of this section shall be recorded. This test record shall identify each receptacle, cord set, and cord-and plug-connected equipment that passed the test and shall indicate the last date it was tested or the interval for which it was tested. This record shall be kept by means of logs, color coding, or other effective means and shall be maintained until replaced by a more current record. The record shall be made available on the jobsite for inspection by the Assistant Secretary and any affected employee.[3]

[3]Paragraph (b)(3)(ii)(C)(4) of the section specifies the testing requirements as follows:

Paragraph (e)(2)(ii) (previously §1910.304(d)(2)(ii)) requires employers to post signs warning of high voltage when employees, other than qualified employees, may come in contact with energized live parts.

• **§1910.305--Wiring methods, components, and equipment for general use.**

Paragraph (h)(8) requires marking each termination enclosure with a high-voltage hazard warning.

Paragraph (j)(4)(ii) requires that employers mark controller-disconnecting means for motor-branch circuits over 600 volts, nominal, and that are out of sight of the controller, with a warning label giving the location and identification of the disconnecting means that is to be locked in the open position.

Paragraph (j)(5)(ii) requires that employers indicate the operating voltage of exposed live parts of transformer installations by using warning signs or visible markings on the equipment or structure.

Paragraph (j)(6)(ii)(C) (previously §1910.305(j)(6)(ii)(A)) requires that capacitors rated over 600 volts, nominal, have isolating or disconnecting switches (with no interrupting rating) that interlock with the load interrupting device or have a prominently displayed caution sign to prevent switching load current.

• **§1910.306--Specific purpose equipment and installations.**

Paragraph (c)(6)(i) requires the employer to identify the disconnecting means with the number that corresponds to the driving machine number that it controls where there is more than one driving machine in the machine room.

"The following tests shall be performed on all cord sets and receptacles which are not a part of the permanent wiring of the building or structure, and cord- and plug-connected equipment required to be grounded: (i) All equipment grounding conductors shall be tested for continuity and shall be electrically continuous; (ii) [e]ach receptacle and attachment cap or plug shall be tested for correct attachment of the equipment grounding conductor. The equipment grounding conductor shall be connected to its proper terminal; and (iii) [a]ll required tests shall be performed before first use; before equipment is returned to service following any repairs; before equipment is used after any incident which can be reasonably suspected to have caused damage (for example, when a cord set is run over); and at intervals not to exceed 3 months, except that cord sets and receptacles which are fixed and not exposed to damage shall be tested at intervals not exceeding 6 months[.]

Paragraph (c)(6)(ii) requires the employer to provide the disconnecting means with a sign to identify the location of the supply side overcurrent protective device.

Paragraph (k)(4)(iv)(B) requires the employer to list single-pole separable connectors used in portable professional motion picture and television equipment and to mark the system to which they are connected.

• **§1910.307--Hazardous (classified) locations.**

Paragraph (b) requires that the employer document all areas designated as hazardous (classified) locations. This documentation shall be available to those authorized to design, install, inspect, maintain, or operate electric equipment at the location.

• **§1910.308--Special systems.**

Paragraph (a)(5)(vii) (previously §1910.308(a)(2)(iii)) requires a means (for example, a fuse holder and fuse designed for the purpose) shall be provided to completely isolate equipment for inspection and repairs. Isolating means that are not designed to interrupt the load current of the circuit shall be either interlocked with an approved circuit interrupter or provided with a sign warning against opening them under load.

Paragraph (a)(6)(i) (previously §1910.308(a)(3)(i)) requires that a metallic enclosure provided on the mobile machine for enclosing the terminals of the power cable must have provisions for locking so only authorized qualified persons may open it, and it must have a sign warning of the presence of energized parts.

Paragraph (a)(6)(ii) (previously §1910.308(a)(3)(ii)) requires employers to enclose energized switching and control parts in effectively grounded and locked metal cabinets or enclosures that are accessible only to authorized qualified persons and be marked with a sign warning of the presence of energized parts.

Paragraph (b)(3)(i) requires the employer to place a sign at the service entrance equipment indicating the type and location of on-site emergency power sources. A sign is not required for individual unit equipment.

Paragraph (b)(3)(ii) requires a sign at the grounding location that identify all emergency and normal sources connected at the location.

• **§1910.333--Selection and use of work practices.**

Paragraph 1910.333(b)(2)(i) requires employers to maintain a written copy of the procedure outlined in paragraph (b)(2) of this standard, and to make it available for inspection by

employees and by the Assistant Secretary of Labor and his/her authorized representatives. The written procedures may be a copy of paragraph (b) of this standard.

Paragraph 1910.333(b)(2)(iii)(B) requires employers to ensure that each tag used contains a statement prohibiting unauthorized operation of the disconnecting means and removal of the tag.

Paragraph 1910.333(b)(2)(v)(B) requires employers to warn employees exposed to the hazards associated with reenergizing the circuit or equipment to stay clear of the circuits 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 information collection provisions in these subparts require labels, markings, written programs, notifications, and tags to alert workers of the presence and the different types of electrical hazards found in the workplace, thereby, preventing serious injuries and deaths from electrocutions.

OSHA also will use the records developed in response to these Standards to determine compliance with the safety and health provisions of the Standards. The employer's failure to generate and disclose the information required by the Standards will affect significantly OSHA's effort to control and reduce injuries and fatalities related to electrical hazards in the workplace.

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.

Employers may use automated, electronic, mechanical, or other technological information collection techniques, or other forms of information technology (e.g., electronic submission of responses) when establishing and maintaining the required records. The Agency wrote the paperwork requirements of the Standards in performance-oriented language (i.e., in terms of what data to collect, not how to record the data).

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 A.2. above.

Some local jurisdictions enforce the National Electrical Code (NEC), which has information collection requirements similar to the requirements specified by the Standards. However, OSHA relies on national consensus standards as a reference and a guide when implementing a standard.

Every edition of the NEC from the 1984 edition to the 2017 edition (representing eleven code cycles) requires that specific AEGC tests be conducted, recorded, and made available to the authority having jurisdiction. However, the specific authority having jurisdiction varies from state to state.

No other similar or duplicate information exists.

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

The information collection requirements specified by the Standards do not have a significant impact on a substantial number of small entities. The Standards use performance language whenever possible to provide compliance flexibility to employers and to reduce the impact on small businesses. Performance language may require small business employers to rely more often than other employers on contractors to provide the safety and health technical expertise necessary to comply with these requirements.

6. Describe the consequences 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 monitor employee exposure to electrical hazards in construction and general industries, and thereby to 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 by the Act at 29 U.S.C. 651.

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

- **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 statistical data classification that has not been reviewed and approved by OMB;**

- **That includes a pledge of confidentially that is not supported by authority established in statue 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 confidentially to the extent permitted by law.**

No special circumstances exist that require employers to collect information using the procedures specified by this item. The requirements are within the guidelines set forth in 5 CFR 1320.5.

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, revealed, 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 three years -- even if the collection of information activity is the same as in prior periods. There may be circumstances that mitigate against 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 on July 1, 2024 (89 FR 54540) requesting public comments on its proposed extension of the information collection requirements contained in the

Electrical Standards for Construction (29 CFR Part 1926, Subpart K) and General Industry (29 CFR Part 1910, Subpart S) under Docket number OSHA-2011-0187. This notice is s part of a preclearance consultation program intended to provide those interested parties the opportunity to comment on OSHA's request for an extension by the Office of Management and Budget (OMB) of a previous approval of the information collection requirements found in the above Standards. The agency did not received any public 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.

There is no assurance of confidentiality provided to respondents as the paperwork requirements specified by these Standards do not involve confidential information.

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 provisions in the Standards require sensitive information.

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.**

- **Provide estimates of annualized cost to respondents for the hour burdens for collections of information, identifying and using appropriate wage-rate categories.**

Respondent Hour and Cost Burden Determinations

Estimating the Wage Rates

OSHA determined the wage rates from *Occupational Employment and Wage Statistics, National Occupational Employment and Wages, May 2023,* Bureau of Labor Statistics, U.S. Department of Labor, and the fringe benefits of 29.6 percent[4] from the Wednesday, March 13, 2024, News Release, *Employer Costs for Employee Compensation – December 2023*. The mean hourly wages for these classifications are $56.58 (17-2071 - electrical certified engineer), $35.79 (17-3023 - electrical and electronic engineering technician), and $82.83 (11-9041 - engineering manager) before fringe benefits.[5]

The costs of labor used in this analysis are, therefore, estimates of the total hourly compensation rate. These hourly wages are:

Table 1--- Estimated Wage Rates with Fringe Benefits

Occupation	SOC Code	Mean hourly rates [*a*]	Fringe benefits [*b*]	Wage rates [*c=(a/1-b)*]
Engineering Manager	11-9041	$82.83	0.296	$117.66
Electrical Certified Engineer	17-2071	$56.58	0.296	$80.37
Electrical and Electronic Engineering Technician (EEET)	17-3023	$35.79	0.296	$50.84

Estimating Cost and Burden Hours

The following sections are the burden hour and cost determinations for the information collection requirements specified by the Standards. The data is based on the final economic analysis (FEA) prepared during the revision of the final rule for 29 CFR Part 1910, Subpart S,

4Employer Costs for Employee Compensation – December 2023, Employer Costs for Employee Compensation – December 2023 (bls.gov)

5The mean hourly rates are found on the Bureau of Labor Statistics website at: May 2023 National Occupational Employment and Wage Estimates (bls.gov)

regarding only OSHA's estimate of the time it would take an employee to perform the necessary electrical safety procedures.

Estimating the Number of Establishments and Employees

Construction Industries: (NAICS 236,238)
There are 715,350 establishments with 6,135,176 employees in the construction industry according to the 2020— County Business Patterns.[6] At an average of 9 jobsites per establishment, OSHA estimates that there are **6,438,150 establishments** affected in the construction industry. (715,350 affected establishments x 9 jobsites = 6,438,150 affected establishments).

Burden-Hour and Cost Determinations

- **§1926.403(h); 1910.303(f)(1)&(2)--Identification of disconnecting means and circuits.**

+
The burden for this requirement applies solely to employers in the construction industry because the task occurs only during initial installation of motors and appliances. The only burden for general industry is checking that the task has been done. The Agency assumes that only 1% of the jobsites will need to mark and identify their system (1% of 6,438,150 jobsites = 64,382). OSHA estimates that it takes an Electrical and Electronic Engineering Technician (EEET) five minutes (0.083 hr.) to mark an average 30 disconnecting means or overcurrent devices usually found on a single panel board at a jobsite.

Burden hours: 64,382 jobsites x 0.083 hour = 5,344 hours
Cost: 5,344 hours x $50.84 = $271,689

- **§1926.403(i)(2)(iii); 1910.303(g)(2)(iii)**

Guarding of live parts (iii) Entrances to rooms and other guarded locations containing exposed live parts shall be marked with conspicuous warning signs forbidding unqualified persons to enter. The only burden for general industry is checking that the task has been done.

OSHA believes that it is usual and customary practice for employers to use the warning signs repeatedly. These signs can be used from one location to another which reduces the burden of constructing or ordering the sign. These reusable warning signs reduce the cost of acquiring a new sign on the employer.

6 Source: us_state_6digitnaics_2020 (1). The number of construction of buildings employers under NAICS 236 is 233,058 and number of employees is 1,495,473. The number of specialty trade contractor employers is 482,292 and the number of employees is 4,639,703. Total employer is 715,350 and total employees is 6,135,176.

OSHA estimates that it will take 3 minutes (.050 hour) to post a warning sign. Only 5% of the jobsites will need to post new signs = 6,438,150 jobsites x .05 = 321,908

Burden hours: 321,908 jobsites x 1 sign x .050 hour = 16,095 hours
Cost: 16,095 hours x $50.84 = $818,270

- **§1926.403(j)(2)(ii); 1910.303(h)(2)(iii)(B)**

Installations accessible to unqualified persons (ii) Electrical installations that are open to unqualified persons shall be made with metal-enclosed equipment or shall be enclosed in a vault or in an area, access to which is controlled by a lock. If metal-enclosed equipment is installed so that the bottom of the enclosure is less than 8 feet above the floor, the door or cover shall be kept locked. Metal-enclosed switchgear, unit substations, transformers, pull boxes, connection boxes, and other similar associated equipment shall be marked with appropriate caution signs. If equipment is exposed to physical damage from vehicular traffic, suitable guards shall be provided to prevent such damage. Ventilating or similar openings will be deflected from energized parts.

The caution signs are posted at the time the equipment is installed and therefore this requirement is only done one time. The burden is taken in construction. The only burden for general industry is checking that the task has been done.

OSHA estimates that it will take 3 minutes (.050 hour) to post the signs. Only 10% of the jobsites will be affected (6,438,150 jobsites x .10 = 643,815).

Burden hours: 643,815 jobsites x 1 sign x .050 hour = 32,191 hours
Cost: 32,191 hours x $50.84 = $1,636,590

- **§ 1926.404(b)(1)(iii)--Assured equipment grounding conductor (AEGC) program.**

Regarding paragraph (b)(1)(iii)(A), OSHA estimates that 99% (6,373,768) of the construction sites elect to use ground-fault circuit interrupters and the remaining 1% (64,382) jobsites will use the AEGC program. OSHA estimates that it takes one hour (1.00 hr.) for an EEET to develop an AEGC program.[7] Accordingly, the Agency estimates that the total annual burden hours and cost of developing the written AEGC programs are:

Burden hours: 64,382 jobsites x 1 hour = 64,382 hours

7 Construction trade associations contacted by OSHA state that they provide preprinted AEGC programs to employers to reduce the time required to develop an AEGC program to about one hour.

Cost: 64,382 hours x $50.84 = $3,273,181

- **§1926.404(d)(2)(ii); §1910.304(e)(2)(ii)**

(d)(2) Services over 600 volts nominal. (ii) Warning signs. Signs warning of high voltage shall be posted where other than qualified employees might come in contact with live parts. The only burden for general industry is checking that the task has been done.

OSHA believes that it is usual and customary practice for employers to use the warning signs repeatedly. These signs can be used from one location to another which reduces the cost of acquiring a new sign on the employer.

OSHA estimates that it will take three minutes (.05 hour) to post the warning sign. Only 3% of the jobsites (193,145) will need to post new signs.

Burden hours: 193,145 jobsites x 1 sign x .05 hour = 9,657 hours
Cost: 9,657 hours x $50.84 = $490,962

- **§1926.405(h); §1910.305(h)(8)**

Terminations (h): This paragraph applies to portable cables used at more than 600 volts nominal. Termination enclosures shall be suitably marked with a high voltage hazard warning, and terminations shall be accessible only to authorized and qualified employees.

The caution signs are posted at the time the equipment is installed. This requirement is done only one time and therefore, the burden is taken in construction. The only burden for general industry is checking that the task has been done.

OSHA estimates that it will take 3 minutes (.05 hour) to post the new sign. And only 5% of the jobsites (321,908) will be affected.

Burden hours: 321,908 jobsites x 1 sign x .05 hour = 16,095 hours
Cost: 16,095 hours x $50.84 = $818,270

- **§1926.405(j)(4)(ii)(A); §1910.305(j)(4)(ii)-- Motors.**

Disconnecting means (j)(4)(ii): An individual disconnecting means shall be provided for each controller. A disconnecting means shall be located within sight of the controller location. However, a single disconnecting means may be located adjacent to a group of coordinated controllers mounted adjacent to each other on a multi-motor continuous process machine. The controller disconnecting means for motor branch circuits over 600 volts, nominal, may be out of

sight of the controller, if the controller is marked with a warning label giving the location and identification of the disconnecting means that is to be locked in the open position.

The burden for this task applies solely to employers in the construction industry because the task occurs only during initial installation of controller-disconnecting means. The only burden for general industry is checking that the task has been done.

OSHA estimates that it takes five minutes (0.083 hour) for an EEET to construct and post a warning label for each controller-disconnecting means, and that 2% of the new construction sites (128,763) use these warning labels on a single controller-disconnecting means.

Burden hours: 128,763 jobsites x 0.083 hour = 10,687 hours
Cost: 10,687 hours x $50.84 = $543,327

§1926.405(j)(5)(ii); §1910.305(j)(5)(ii)—Equipment for general use.

Transformer (j)(5)(ii): The operating voltage of exposed live parts of transformer installations shall be indicated by signs or visible markings on the equipment or structure. The only burden for general industry is checking that the task has been done.

The burden for this task applies solely to employers in the construction industry because the task occurs only during initial installation. OSHA estimates that it takes three minutes (0.050 hour) for an EEET to post a warning sign, and that 5% of the construction sites (321,908) need to use warning signs.

Burden hours: 321,908 jobsites x 0.050 hour = 16,095 hours
Cost: 16,095 hours x $50.84 = $818,270

- **§1926.405(j)(6)(ii)(A); §1910.305(j)(6)(ii)(C)—Equipment for general use.**

Capacitors (j)(6)(ii): Isolating or disconnecting switches (with no interrupting rating) shall be interlocked with the load interrupting device or shall be provided with prominently displayed caution signs to prevent switching load current; and only the burden for general industry is checking that the task has been done.

OSHA estimates that it will take 3 minutes (.05 hour) to post the signs. Only 2% of the jobsites (128,763) will be affected.

Burden hours: 128,763 jobsites x 1 sign x .05 hour = 6,438 hours
Cost: 6,438 hours x $50.84 = $327,308

- §**1926.408(a)(2)(iii); 1910.308(a)(5)(vii)—Special Systems**

Interrupting and isolating devices (a)(2)(iii) A means (for example, a fuse holder and fuse designed for the purpose) shall be provided to completely isolate equipment for inspection and repairs. Isolating means that are not designed to interrupt the load current of the circuit shall be either interlocked with an approved circuit interrupter or provided with a sign warning against opening them under load. The only burden for general industry is checking that the task has been done.

OSHA estimates that it will take 3 minutes (.05 hour) to post the warning sign. Only 1% of the jobsites will need to post new signs = 6,438,150 jobsites x .01 = 64,382

Burden hours: 64,382 jobsites x 1 sign .05 hour = 3,219 hours
Cost: 3,219 hours x $50.84 = $163,654

- §**1926.408(a)(3)(i); 1910.308(a)(6)(i)—Special Systems**

Mobile and portable equipment (a)(3)(i) A metallic enclosure shall be provided on the mobile machine for enclosing the terminals of the power cable. The enclosure shall include provisions for a solid connection for the grounding terminal to effectively ground the machine frame. The method of cable termination used shall prevent any strain or pull on the cable from stressing the electrical connections. The enclosure shall have provision for locking so only authorized qualified persons may open it and shall be marked with a sign warning of the presence of energized parts.

OSHA believes that it is a usual and customary practice for employers to use the warning signs repeatedly. These signs can be used from one location to another which reduces the cost of acquiring a new sign on the employer.

OSHA estimates that it will take 3 minutes (.05 hour) to acquire and post the warning sign. Only 2% of the jobsites (128,763) will need to post new signs.

Burden hours: 128,763 jobsites x 1 sign x .05 hour = 6,438 hours
Cost: 6,438 hours x $50.84 = $327,308

- **§1926.408(a)(3)(ii); §1910.308(a)(6)(ii)— Special Systems**

Mobile and portable equipment--(a)(3)(ii): All energized switching and control parts shall be enclosed in effectively grounded metal cabinets or enclosures. Circuit breakers and protective equipment shall have the operating means projecting through the metal cabinet or enclosure so these units can be reset without locked doors being opened. Enclosures and metal cabinets shall be locked so that only authorized qualified persons have access and shall be marked with a sign

warning of the presence of energized parts. Collector ring assemblies on revolving-type machines (shovels, draglines, etc.) shall be guarded.

OSHA believes that it is a usual and customary practice for employers to use the warning signs repeatedly. These reusable warning signs reduce the cost of a new sign on the employer.

OSHA estimates that it will take 3 minutes (.05 hour) to acquire and post the warning sign. Only 2% of the jobsites (128,763) will need to post new signs.

Burden hours: 128,763 jobsites x 1 sign x .05 hour = 6,438 hours
Cost: 6,438 hours x $50.84 = $327,308

- **§1926.416(a)(3)—General requirements**

Before work is begun, the employer shall ascertain by inquiry or direct observation, or by instruments, whether any part of an energized electric power circuit, exposed or concealed, is so located that the performance of the work may bring any person, tool, or machine into physical or electrical contact with the electric power circuit. The employer shall post and maintain proper warning signs where such a circuit exists. The employer shall advise employees of the location of such lines, the hazards involved, and the protective measures to be taken.

These warning signs and marks alert unqualified and unauthorized employees of the presence of electrical hazards and notify electricians of the need to exercise caution and to take other measures to protect themselves when they are near electrical hazards.

OSHA estimates that it will take 3 minutes (.05 hour) to acquire and post the warning sign. Only 2% of the jobsites (128,763) will need to use new signs.

Burden hours: 128,763 jobsites x 1 sign x .05 hour = 6,438 hours
Cost: 6,438 hours x $50.84 = $327,308

- **§1926.417(a), (b), & (c)--Lockout and tagging of circuits**

Controls: (a) Controls that are to be deactivated during the course of work on energized or deenergized equipment or circuits shall be tagged.

Equipment and circuits: (b) Equipment or circuits that are deenergized shall be rendered inoperative and shall have tags attached at all points where such equipment or circuits can be energized.

Tags: (c) Tags shall be placed to identify plainly the equipment or circuits being worked on.

The Agency assumes that contractors tag one electrical hazard at each jobsite, and that an electrician spends one minute (0.017 hour) tagging each hazard. OSHA estimates that only 5% of the jobsites (321,908) will need to use lockout and tagging.

Burden hours: 321,908 jobsites x 1 tag x 0.017 hour = 5,472 hours
Cost: 5,472 hours x $50.84 = $278,196

General Industry:

Following the industries covered by Subpart S outlined in the Final Economic Analysis (FEA) (72 FR 7136) of the final rule to revise 29 CFR Part 1910, there are now 520,283 establishments and 5,686,598 employees in under NAICS codes 237 and 238 according the 2020 County Business Patterns. OSHA estimates that 51% of the establishments in general industry under state and local governments already covered under the latest National Electric Code (NEC) meeting the Standard and the other 49% of employers are not governed by state and local governments. Based on the analysis of the remaining employers (i.e., those employers not governed by states and cities mandating the NEC), OSHA estimates that a total of 254,939 establishments and 2,786,433 employees are affected by the Standards.

Based on the total number of affected establishments in general industry, only the new installations will be affected by this requirement. OSHA estimates that only 1% of the affected establishments will be new (i.e., 254,939 establishments x 1% = **2,549 new affected establishments**).

- **§1910.303(f) -- Disconnecting means and circuits**

Paragraph (f)(5)(i)--Where circuit breakers or fuses are applied in compliance with the series combination ratings marked on the equipment by the manufacturer, the equipment enclosures shall be legibly marked in the field to indicate that the equipment has been applied with a series combination rating.

Paragraph (f)(5)(ii)--The marking required by paragraph (f)(5)(i) of this section shall be readily visible and shall state "Caution -- Series Combination System Rated_ Amperes. Identified Replacement Component Required."

Since this information is readily available to employers (i.e., provided on the equipment by the manufactures), OSHA estimates that an EEET takes two minutes (0.033 hour) to determine the series-combination ratings on the equipment and mark the ampere rating of the system in the designated space. In addition, the Agency estimates that 75% (1,912) of the new establishments need to mark the ampere ratings (2,549 new establishments x .75 = 1,912 new establishments), and that each new establishment needs to mark one equipment enclosure. Accordingly, the total yearly burden hour and cost estimates resulting from this requirement are:

Burden hours: 1,912 new installations x .033 hour = 63 hours
Cost: 63 hours x $50.84 = $3,203

- **§1910.304(b) -- Branch circuits**

Identification of multiwire branch circuits (b)(1)--Where more than one nominal voltage system exists in a building containing multiwire branch circuits, each ungrounded conductor of a multiwire branch circuit, where accessible, shall be identified by phase and system. The means of identification shall be permanently posted at each branch-circuit panelboard.

Since this information is readily available to employers (i.e., provided on the equipment by the manufacturer), OSHA estimates that it takes an EEET approximately one minute (0.017 hour) to mark the phase and system of each ungrounded conductor. The Agency also estimates that 75% (1,912) of the new establishments need to perform this task (i.e., mark one ungrounded conductor). Thus, the total annual burden hours and cost estimated for this requirement are:

Burden hours: 1,912 new establishments x 0.017 hour = 33 hours
Cost: 33 hours x $50.84 = $1,678

Ground-fault circuit interrupter protection for personnel (b)(3)(ii)(C)(1)--A written description of the program, including the specific procedures adopted by the employer, shall be available at the jobsite for inspection and copying by the Assistant Secretary of Labor and any affected employee;

Assuming that 99.97% of the establishments will use ground-fault circuit-interrupter protection and; therefore, are not eligible to use an AEGC program, then the Agency estimates that .03% (76) of the establishments will use a written AEGC program (254,939 establishments x .0003 = 76 establishments). Based on information obtained from construction-trade associations, employers are provided with preprinted AEGC programs that reduce program development time. OSHA estimates that an EEET will take one hour to develop a written AEGC program. The total burden hours and cost of the development of this program is:

Burden hours: 76 establishments x 1 hour = 76 hours
Cost: 76 hours x $50.84 = $3,864

This provision also requires employers to maintain the written AEGC programs at the jobsite, and to disclose the programs to OSHA compliance officers and affected employees. The Agency estimates that an EEET requires one minute (0.017 hour) each year maintaining written program. Based on these estimates, the total time for an EEET to maintain the program is one minute (0.017 hour). Therefore, the Agency estimates that the total annual burden hours and cost for these information collection requirements are:

Burden hours: 76 establishments x 0.017 hour to maintain = 2 hour
Cost: 2 hours x $50.84 = $102

Paragraph (b)(3)(ii)(C)(6)--Tests performed as required in paragraph (b)(3)(ii)(C) of this section shall be recorded. This test record shall identify each receptacle, cord set, and cord- and plug-connected equipment that passed the test and shall indicate the last date it was tested or the interval for which it was tested. This record shall be kept by means of logs, color coding, or other effective means and shall be maintained until replaced by a more current record. The record shall be made available on the jobsite for inspection by the Assistant Secretary and any affected employee.

OSHA believes that the 76 establishments with written AEGC programs test equipment and record the test results four times a year. It also estimates that an EEET takes three minutes (0.050 hour) to perform each test and two minutes (0.033 hour) to record the test results, for a total test-and record time of five minutes (0.08 hour). These requirements result in total annual burden hour and cost estimates of:

Burden hours: 76 establishments x 4 tests/year x 0.08 hour = 24 hours
Cost: 25 hours x $50.84 = $1,271

Total burden hours for AEGC programs: 76 hours + 2 hours + 24 hours = 102 hours
Total cost: $3,864 + $102 + $1,220 = $5,186

- **§1910.306(c) -- Specific purpose equipment and installations.**

Paragraph (6)(i)--Where there is more than one driving machine in a machine room, the disconnecting means shall be numbered to correspond to the identifying number of the driving machine that they control.

In meeting this requirement, OSHA estimates that identifying and correctly numbering the disconnecting means takes an EEET eight minutes (0.133 hour), and that 20% (510) of the new establishments must perform this task (2,549 new establishments x .20 = 510 new establishments). Accordingly, the estimated total annual burden hours and cost for this requirement are:

Burden hours: 510 new establishments x 0.133 hour = 68 hours
Cost: 68 hours x $50.84 = $3,457

Paragraph (6)(ii)--The disconnecting means shall be provided with a sign to identify the location of the supply-side overcurrent protective device.

OSHA assumes that all new establishments must post one sign to identify the location of the supply-side overcurrent protective device, and that an EEET performs this task in eight minutes (0.133 hour). This requirement results in the following total annual burden hour and cost estimates:

Burden hours: 2,549 new establishments x 0.133 hour = 339 hours
Cost: 339 hours x $50.84 = $17,235

- **§1910.306(k) --- Carnivals, circuses, fairs, and similar events**

Paragraph (4)(iv)(B)--Single-pole separable connectors used in portable professional motion picture and television equipment may be interchangeable for ac or dc use or for different current ratings on the same premises only if they are listed for ac/dc use and marked to identify the system to which they are connected;

The Agency estimates that .5% (13) of the new establishments use interchangeable single-pole separable connectors in portable professional motion pictures and television equipment (2,549 new establishments x .005 = 13 new establishments), and that an EEET requires eight minutes (.13 hour) to list the connectors for ac/dc use and mark them to identify the system to which they are connected. Therefore, OSHA estimates the total annual burden hours and cost of this requirement are:

Burden hours: 13 new establishments x 0.133 hour = 2 hours
Cost: 2 hours x $50.84 = $102

- **§1910.307(b) -- Documentation**

Paragraph (b)--All areas designated as hazardous (classified) locations under the Class and Zone system and areas designated under the Class and Division system established after August 13, 2007, shall be properly documented. This documentation shall be available to those authorized to design, install, inspect, maintain, or operate electric equipment at the location.

This documentation consists of area-classification drawings that provide information for designers, installers, inspectors, and other personnel who must ensure that electrical equipment installed and maintained at hazardous (classified) locations meets the certification requirements specified elsewhere in the Standard. The Agency assumes that 40% (1,020) of the new establishments will require this documentation (2,549 new establishments x 0.4 = 1,020 new establishments) for one of these locations, and that an electrical certified engineer takes four hours to produce this documentation. Consequently, the estimated total annual burden hours and cost for this documentation are:

Burden hours: 1,020 new establishments x 4 hours = 4,080 hours

Cost: 4,080 hours x $80.37 = $327,910

- **§1910.308(b) -- Emergency power system**

Paragraph (b)(3)(i)--A sign shall be placed at the service entrance equipment indicating the type and location of on-site emergency power sources. However, a sign is not required for individual unit equipment.

According to OSHA's estimates, an engineering manager takes one minute (0.017 hour) to brief an EEET about the required task, and five minutes (0.083 hour) for the EEET to place the sign. The Agency assumes that 30% (765) of the new establishments must acquire and place one of these signs (2,549 new establishments x 0.3 = 765 new establishments). The resulting annual total burden hour and cost estimates are:

Burden hours: 765 new establishments x 0.017 hour = 13 hours
765 new establishments x 0.083 hour = 63 hours
Total burden hours: 76 hours

Cost: 13 hours x $117.66 = $1,530
63 hours x $50.84 = $3,203
Total cost: $4,733

Paragraph (b)(3)(ii)--Where the grounded circuit conductor connected to the emergency source is connected to a grounding electrode conductor at a location remote from the emergency source, there shall be a sign at the grounding location that shall identify all emergency and normal sources connected at that location.

To meet this requirement, the Agency estimates that an engineering manager takes one minute (0.017 hour) to brief an EEET regarding the required task, and five minutes (0.083 hour) for the EEET to place the sign. OSHA believes that 2% (51) of the new establishments must acquire and place one of these signs (2,549 new establishments x 0.02 = 51 new establishments). The Agency estimates the annual total burden hours and cost of this 1requirement to be:

Burden hours: 51 new establishments x 0.017 hour = 1 hours
51 new establishments x 0.083 hour = 4 hours
Total burden hours: 5 hours

Cost: 1 hour x $117.66 = $118
4 hours x $50.84 = $203
Total cost: $321

- **1910.333--Selection and use of work practices.**

Procedures. Paragraph 1910.333(b)(2)(i) requires employers to maintain a written copy of the lockout and tagging procedure outlined in paragraph (b)(2) of this standard, and to make it available for inspection by employees and by the Assistant Secretary of Labor and his/her authorized representatives. The written procedures may be a copy of paragraph (b) of this standard.

OSHA estimates that it will take 15 minutes (0.250 hours) to record and maintain a written copy of the procedure outlined in requirement. Only 85% of the establishment will need a written copy of the procedure to use for tagging 2,549 establishments x 0.85 =2,167).

Burden hours: 2,167 new establishments x 1 procedure x 0.250 hour = 542 hours
Cost: 542 hours x $50.84 = $27,555

Application of locks and tags. Paragraph 1910.333(b)(2)(iii)(B) requires employers to ensure that each tag used contains a statement prohibiting unauthorized operation of the disconnecting means and removal of the tag.

These tags alert unqualified and unauthorized employees of the presence of electrical hazards and notify other employees in the vicinity of the need to exercise caution when they are near electrical hazards.

The Agency assumes that each establishment will use one tag for each system and that an electrician spends three minutes 0.017 hour) tagging each disconnect. OSHA estimates that only 85% of the establishment (2,167) will need to use lockout and tagging (2,549 establishments x 0.85 = 2,167)

Burden hours: 2,167 new establishments x 1 tags x 0.050 hour = 108 hours
Cost: 108 hours x $50.84 = $5,491

Paragraph 1910.333(b)(2)(v)(B) requires employers to warn employees exposed to the hazards associated with reenergizing the circuit or equipment to stay clear of the circuits and equipment.

These warning signs and marks alert unqualified and unauthorized employees of the presence of electrical hazards, and notify electricians of the need to exercise caution and to take other measures to protect themselves when they are near electrical hazards.

OSHA estimates that it will take five minutes (0.083 hour) to acquire and post the warning sign. (2,549 establishments x 9 = 22,941 jobsites) Only 15% of the jobsites (22,941 jobsites x .15 = 3,441) will need to use new signs.

Burden hours: 3,441 x 1 sign x 0.083 hour = 286 hours
Cost: 286 hours x $50.84 = $14,540

Electrical Standards for Construction (29 CFR PART 1926, Subpart K)
and General Industry (29 CFR PART 1910, Subpart S)
OMB Control Number: 1218-0130
Expiration Date: October 31, 2024

TABLE 2--Electrical Standards for Construction and General Industry: Estimated Annualized Respondent Burden Hours and Cost

	Information Collection Requirements	Number of Respondents	Responses per Respondent	Total Responses	Time per Response	Burden Hours	Loaded Hourly Wage	Cost
		a	b	c = a x b	d	e = c x d	f	g = e x f
Construction Standards – 1926								
1	§§1926.403(h); 1910.303(f)--Identification of disconnecting means and circuits.	6,438,150	0.010	64,382	0.083 hours	5,344	$50.84	$271,689
2	§§1926.403(i)(2)(iii); 1910.303 (g)(2)(iii)--600 Volts, nominal, or less.--Guarding of live parts.	6,438,150	0.050	321,908*	0.050 hours	16,095	$50.84	$818,270
3	§§1926.403(j)(2)(ii); 1910.303 (h)(2)(iii)(B)--Over 600 Volts, nominal.--Installations accessible to unqualified persons.	6,438,150	0.100	643,815*	0.050 Hours	32,191	$50.84	$1,636,590
4	§1926.404(b)(1)(iii)--Assured equipment grounding conductor (AEGC) program.	6,438,150	0.010	64,382	1 hour	64,382	$50.84	$3,273,181
5	§§1926.404 (d)(2)(ii); 1910.304(e)(2)(ii)--Services over 600 volts, nominal--Warning signs.	6,438,150	0.030	193,145*	0.050 hours	9,657	$50.84	$490,962

Electrical Standards for Construction (29 CFR PART 1926, Subpart K) and General Industry (29 CFR PART 1910, Subpart S)
OMB Control Number: 1218-0130
Expiration Date: October 31, 2024

	Information Collection Requirements	Number of Respondents	Responses per Respondent	Total Responses	Time per Response	Burden Hours	Loaded Hourly Wage	Cost
		a	b	c = a x b	d	e = c x d	f	g = e x f
6	§§1926.405(h); 1910.305(h)(8)--Portable cables over 600 volts, nominal.	6,438,150	0.050	321,908*	0.050 hours	16,095	$50.84	$818,270*
7	§§1926.405(j)(4)(ii)(A); 1910.305(j)(4) (ii)--Disconnecting means for motor-branch circuits.	6,438,150	0.020	128,763**	0.083 hours	10,687	$50.84	$543,327**
8	§§1926.405(j)(5)(ii); 1910.305(j)(5)(ii)-Transformer operating voltages.	6,438,150	0.050	321,908*	0.050 hours	16,095	$50.84	$818,270*
9	§§1926.405(j)(6)(ii)(A); 1910.305(j)(6)(ii)(C)--Equipment for general use--Capacitors.	6,438,150	0.020	128,763*	0.050 Hours	6,438	$50.84	$327,308*
10	§§1926.408(a)(2)(iii); 1910.308(a)(2)(iii)--Equipment isolating means.	6,438,150	0.010	64,382*	0.050 hours	3,219	$50.84	$163,654*
11	§§1926.408(a)(3)(i); 1910.308(a)(3)(i)-- Power cable connections to mobile machines.	6,438,150	0.020	128,763*	0.050 hours	6,438	$50.84	$327,308*

Electrical Standards for Construction (29 CFR PART 1926, Subpart K)
and General Industry (29 CFR PART 1910, Subpart S)
OMB Control Number: 1218-0130
Expiration Date: October 31, 2024

	Information Collection Requirements	Number of Respondents	Responses per Respondent	Total Responses	Time per Response	Burden Hours	Loaded Hourly Wage	Cost
		a	b	c = a x b	d	e = c x d	f	g = e x f
12	§§1926.408(a)(3)(ii); 1910.308(a)(3)(ii)--Mobile and portable equipment.	6,438,150	0.020	128,763*	0.050 hours	6,438	$50.84	$327,308*
13	§§1926.416(a)(3)--General requirements--Protection of employees.	6,438,150	0.020	128,763*	0.050 hours	6,438	$50.84	$327,308*
14	§1926.417(a), (b), and (c)--Lockout and tagging of circuits.	6,438,150	0.050	321,908	0.017 hours	5,472	$50.84	$278,196
	General Industry – 1910							
15	§1910.303(f)(5)(i)&(ii)--Disconnecting means and circuits.	2,549	0.750	1,912	0.033 hours	63	$50.84	$3,203
16	§1910.304(b)(1)--Branch circuits-- Identification of multiwire branch circuits.	2,549	0.750	1,912**	0.017 hours	33	$50.84	$1,678**
17	§1910.304 (b)(3)(ii)(C)(1) &(6)-- Ground-fault circuit interrupter protection for personnel.	2,549	0.179	456	varies hour	102	$50.84	$5,186
18	§1910.306(c)(6)(i)--Specific purpose equipment and installations-- Identification and signs.	2,549	0.200	510*	0.133 hours	68	$50.84	$3,457*

Electrical Standards for Construction (29 CFR PART 1926, Subpart K) and General Industry (29 CFR PART 1910, Subpart S)
OMB Control Number: 1218-0130
Expiration Date: October 31, 2024

	Information Collection Requirements	Number of Respondents	Responses per Respondent	Total Responses	Time per Response	Burden Hours	Loaded Hourly Wage	Cost
		a	b	c = a x b	d	e = c x d	f	g = e x f
19	§1910.306(c)(6)(ii)--Specific purpose equipment and installations-- Identification and signs.	2,549	1	2,549*	0.133 hours	339	$50.84	$17,235*
20	§1910.306(k)(4)(iv)(B)--Carnivals, circuses, fairs, and similar events--Portable distribution and termination boxes.	2,549	0.005	13	0.133 hours	2	$50.84	$102
21	§1910.307(b)--Documentation.	2,549	0.400	1,020	4 hours	4,080****	$80.37	$327,910
22	§1910.308 (b)(3)(i)--Emergency power system.	2,549	0.600	1,530	varies hours	76	$varies	$4,866
23	§1910.308(b)(3)(ii)--Emergency power system.	2,549	0.040	102	varies hours	5	$varies	$321
24	1910.333(b)(2)(i)--Selection and use of work practices--Procedures.	2,549	0.850	2,167	0.25 hours	542****	$50.84	$27,555
25	1910.333(b)(2)(iii)(B)--Selection and use of work practices--Application of locks and tags.	2,549	0.850	2,167	0.050 hours	108	$50.84	$5,491

Electrical Standards for Construction (29 CFR PART 1926, Subpart K) and General Industry (29 CFR PART 1910, Subpart S)
OMB Control Number: 1218-0130
Expiration Date: October 31, 2024

	Information Collection Requirements	Number of Respondents	Responses per Respondent	Total Responses	Time per Response	Burden Hours	Loaded Hourly Wage	Cost
		a	b	c = a x b	d	e = c x d	f	g = e x f
26	1910.333(b)(2)(v)(B)--Selection and use of work practices--Application of locks and tags.	2,549	1.350	3,441*	0.083 hours	286	$50.84	$14,540*
27	**TOTAL**	**970,289*** **		**2,979,332**		**210,693**		**$10,833,050**

*All employers who need to purchase signs.
**All employers who need to purchase labels.
***The number of respondents is 970,289.
****Recordkeeping.

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 service 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.**

Capital Cost Determinations

As noted in Item 12 above, OSHA estimated that §1910.304(b)(1) requires 75% (1,912) of the new establishments to label the phase and system of one ungrounded conductor a year and §1926.405(j)(4)(ii) requires warning labels (128,763) for the disconnecting means of motor branch circuits. Therefore, these establishments must purchase a total of 130,675 labels to complete the task. The agency assumes that each label costs $12.95.[8] Accordingly, the total cost each year to these employers is:

8 http://www.mysafetysign.com/Safety-Signs/High-Voltage-Warning-Signs/High-Voltage-Sign/SAF-SKU-S-2210.aspx?themeid=8310

Cost: 130,675 labels x $12.95 = $1,692,241

As noted in Item 12 above, OSHA estimated that new establishments will need to acquire caution or warning signs to guard workers from coming in contact with energized parts. Therefore, these new establishments must purchase a total of 2,388,618 signs to complete this task. The agency assumes that each sign costs $19.18.[9] Accordingly, the total cost in the first year to these employers is:

Cost: 2,388,618 signs x $19.18 = $45,813,693

Total cost annualized over a three-year period to the employer is: ($1,692,241 + $45,813,693) / 3 years = $47,505,934 / 3 = **$15,835,311**.

This increase in cost is due to the purchase of warning and caution signs. The price of the labels and signs have gone up.

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), 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.

There are no costs to the Federal Government.

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

OSHA is requesting an adjusted increase in the burden hours from 200,045 to 210,693 hours, a total increase of 10,648 burden hours, for the Electrical Standards for Construction and General Industry. This reflects an update of the industry profile information where the estimated number of affected establishments increased from 923,147 to 970,289. Also, the maintenance cost of the labels and warning signs have increased from $45,930,734.70 to $47,505,934, a difference of $1,575,200.70. The total cost annualized over a three-year period to the employer increased to $15,835,311 for the cost of the labels and signs.

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.

9 http://www.mysafetysign.com/Safety-Signs/High-Voltage-Warning-Signs/High-Voltage-Sign/SAF-SKU-S-2210.aspx?themeid=8310

OSHA will not publish the information collected under the Standards.

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

OSHA lists current valid control numbers in §§1910.8, 1915.8, 1917.4, 1918.4, and 1926.5 and publishes the expiration date in the 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

The supporting statement does not contain any collection of information requirements that employ statistical methods.