DEPARTMENT OF LABOR

Occupational Safety and Health Administration

29 CFR Part 1926

[Docket ID—OSHA–2007–0066]

RIN 1218–AC86

Cranes and Derricks in Construction: Operator Certification Extension

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

ACTION: Notice of proposed rulemaking.

SUMMARY: Under OSHA’s standard for cranes and derricks used in construction work, crane operators are to be certified by November 10, 2017. Until that date, employers also have duties under the standard to ensure that crane operators are trained and competent to operate the crane safely. The Agency delayed the deadline for operator certification by three years to November 10, 2017, and extended the existing employer duties for the same period. The Agency is proposing to delay the deadline and extend the existing employer duty to ensure that operators of equipment covered by this standard are competent to operate the equipment safely for one year to November 17, 2018.

DATES: Submit comments to this proposed rule, including comments to the information collection (paperwork) determination (described under the section titled “Agency Determinations”), hearing requests, and other information by September 29, 2017. All submissions must bear a postmark or provide other evidence of the submission date.

ADDRESSES: Submit comments, hearing requests, and other material, identified by Docket No. OSHA–2007–0066, using any of the following methods:

Electronically: Submit comments and attachments, as well as hearing requests and other information, electronically at http://www.regulations.gov, which is the Federal e-Rulemaking Portal. Follow the instructions online for submitting comments. Note that this docket may contain several different Federal Register notices involving active rulemakings, so it is extremely important to select the correct notice or its ID number when submitting comments for this rulemaking. After accessing the docket (OSHA–2007–0066), check the “proposed rule” box in the column headed “Document Type,” find the document posted on the date of publication of the Federal Register, and click the “Submit a Comment” link. Additional instructions for submitting comments are available from the regulations.gov homepage. Facsimile: OSHA allows facsimile transmission of comments that are 10 pages or fewer in length (including attachments). Fax these documents to the OSHA Docket Office at (202) 693–1648. OSHA does not require hard copies of these documents. Instead of transmitting facsimile copies of attachments that supplement these documents (e.g., studies, journal articles), commenters must submit these attachments to the OSHA Docket Office, Technical Data Center, Room N–2625, OSHA, U.S. Department of Labor, 200 Constitution Ave. NW, Washington, DC 20210. These attachments must clearly identify the sender’s name, the date, subject, and the docket number (OSHA–2007–0066) so that the Docket Office can attach them to the appropriate document.

Regular mail, express delivery, hand delivery, and messenger (courier) service: Submit comments and any additional material to the OSHA Docket Office, RIN No. 1218–AC86, Technical Data Center, Room N–3508, OSHA, U.S. Department of Labor, 200 Constitution Ave. NW., Washington, DC 20210; telephone: (202) 693–2350. (OSHA’s TTY number is (877) 889–5627). Contact the OSHA Docket Office for information about security procedures concerning delivery of materials by express delivery, hand delivery, and messenger service. The Docket Office will accept deliveries (express delivery, hand delivery, messenger service) during the Docket Office’s normal business hours, 8:15 a.m. to 4:45 p.m., e.s.t.

Instructions: All submissions must include the Agency’s name, the title of the rulemaking (Cranes and Derricks in Construction: Operator Certification Extension), and the docket number (i.e., OSHA Docket No. OSHA–2007–0066). OSHA will place comments and other material, including any personal information, in the public docket without revision, and the comments and other material will be available online at http://www.regulations.gov. Therefore, OSHA cautions commenters about submitting statements they do not want made available to the public, or submitting comments that contain personal information (either about themselves or others) such as Social Security numbers, birth dates, and medical data.

Docket: To read or download comments or other material in the docket, go to http://www.regulations.gov or to the OSHA Docket Office at the above address. The electronic docket for this proposed rule established at http://www.regulations.gov contains most of the documents in the docket. However, some information (e.g., copyrighted material) is not available publicly to read or download through this Web site. All submissions, including copyrighted material, are available for inspection at the OSHA Docket Office. Contact the OSHA Docket Office for assistance in locating docket submissions.

FOR FURTHER INFORMATION CONTACT: General information and press inquiries: Mr. Frank Meilinger, OSHA Office of Communications; telephone: (202) 693–1999; email: Meilinger.Francis@dol.gov. Technical inquiries: Mr. Vernon Preston; telephone: (202) 693–2020; fax: (202) 693–1689; email: Preston.Vernon@dol.gov.

Copies of this Federal Register notice and news releases: Electronic copies of these documents are available at OSHA’s Web page at http://www.osha.gov.

SUPPLEMENTARY INFORMATION:

I. Summary and Explanation of the Proposed Amendments to the Standard

A. Introduction

OSHA is publishing this Notice of Proposed Rulemaking to extend for one year the employer duty to ensure crane operator competency for construction work, from November 10, 2017, to November 10, 2018. OSHA also is proposing to delay the enforcement date for crane operator certification for one year from November 10, 2017, to November 10, 2018. This would be the second delay of the enforcement date, which OSHA needs to address stakeholder concerns over the operator certification requirements in the 2010 cranes and derricks in construction standard.

B. Summary of Economic Impact

This proposed rule is not economically significant. OSHA proposes to revise 29 CFR 1926.1427(k) (competency assessment and training) to delay the deadline for compliance with the operator certification requirement in its construction standard for cranes and derricks, and to extend the existing employer duties for the same period. OSHA’s preliminary economic analysis shows that delaying the date for operator certification and employers’ assessment of crane operators, rather than allowing both provisions to expire on November 10, 2017, will result in a net cost savings for the affected industries. Delaying the compliance date for operator certification results in a net cost savings that exceed the estimated new costs for employers to continue to assess crane operators to
ensure their competent operation of the equipment in accordance with § 1926.1427(k). The detailed preliminary economic analysis is in the “Agency Determinations” section of this preamble.

C. Background

1. Operator Certification Options

OSHA developed the final rule for cranes and derricks in construction (29 CFR subpart CC, referred to as “the crane standard” hereafter) through a negotiated rulemaking process. OSHA established a federal advisory committee, the Cranes and Derricks Negotiated Rulemaking Advisory Committee (C–DAC), to develop a draft proposed rule. C–DAC met in 2003 and 2004 and developed a draft proposed rule (which included the provisions concerning crane operator certification at issue in this rulemaking) that it provided to OSHA. The rule OSHA subsequently proposed closely followed C–DAC’s draft proposal (73 FR 59718).

The Agency initiated a Small Business Advocacy Review Panel in 2006. The Agency published the proposed rule for cranes in construction in 2008, received public comment on the proposal, and conducted a public hearing. Among many other provisions, OSHA’s final rule incorporated, with minor changes, the four-option certification scheme that C–DAC had recommended and the Agency had proposed. Accordingly, in § 1926.1427, as originally promulgated, OSHA required employers to ensure that their crane operators are certified under at least one of four options by November 10, 2014:

Option 1. Certification by an independent testing organization accredited by a nationally recognized accrediting organization;

Option 2. Qualification by an employer’s independently audited program;

Option 3. Qualification by the U.S. military;

Option 4. Compliance with qualifying state or local licensing requirements (where mandatory).

The third-party certification option in § 1926.1427(b)—Option 1—is the only certification option that is “portable,” meaning that any employer who employs an operator may rely on that operator’s certification as evidence of compliance with the crane standard’s operator certification requirement. This certification option also is the only one that is available to all employers; it is the option that OSHA, and the parties that participated in the rulemaking, believed would be the one most widely used. In this regard, OSHA is not aware of an audited employer qualification program among construction industry employers (Option 2), and the crane standard limits the U.S. military crane operator certification programs (Option 3) to federal employees of the Department of Defense or the armed services. While state and local governments certify some crane operators (Option 4), the vast majority of operators who become certified do so through Option 1—by third-party testing organizations accredited by a nationally recognized accrediting organization.

Under Option 1, a third party performs testing. Before a testing organization can issue operator certifications, paragraph 1427(b)(1) of the crane standard provides that a nationally recognized accrediting organization must accredit the testing organizations. To accredit a testing organization, the accrediting agency must determine that the testing organization meets industry-recognized criteria for written testing materials, practical examinations, test administration, grading, facilities and equipment, and personnel. The testing organization must administer written and practical tests that:

• Assess the operator’s knowledge and skills regarding subjects specified in the crane standard;
• Provide different levels of certification based on equipment capacity and type;
• Have procedures to retest applicants who fail; and
• Have testing procedures for recertification.

Paragraph 1427(b)(2) of the final crane standard also specifies that, for the purposes of compliance with the crane standard, an operator is deemed qualified to operate a particular piece of equipment only if the operator is certified for that type and capacity of equipment or for higher-capacity equipment of that type. It further provides that, if no testing organization offers certification examinations for a particular equipment type and/or capacity, the operator is deemed qualified to operate that equipment if the operator is certified for the type/capacity of equipment that is most similar to that equipment, and for which a certification examination is available.

2. Overview of § 1926.1427(k) (Phase-in Provision)

The final crane standard replaced provisions in 29 CFR 1926 subpart N—Cranes, Derricks, Hoists, Elevators, and Conveyors—of the construction safety standards. Provisions for employers to ensure that operators of equipment, including cranes, are trained and qualified to safely operate that equipment are available elsewhere in the construction safety standards (see, for example, § 1926.20(b)(4) and (f)(2)).

OSHA delayed the effective date of the operator certification requirement for four years, until November 10, 2014 (see § 1427(k)(1)). To make sure that crane operators knew how to operate equipment safely during this phase-in period, the Agency required employers to “ensure that operators of equipment covered by this standard are competent to operate the equipment safely” (§ 1926.1427(k)(2)(ii)). When the operator “assigned to operate machinery does not have the required knowledge or ability to operate the equipment safely,” the standard requires employers to train and evaluate the operator (§ 1926.1427(k)(2)(ii)).

3. Post-Final Rule Developments

After OSHA issued the final rule, it continued to receive feedback from members of the regulated community and conducted stakeholder meetings on April 2 and 3, 2013, to give interested members of the public the opportunity to express their views. Participants included construction contractors, labor unions, crane manufacturers, crane rental companies, accredited testing organizations, one of the accrediting bodies, insurance companies, crane operator trainers, and military employers. Detailed notes of participants’ comments are available at OSHA—2007–0066–0539. Various parties informed OSHA that, in their opinion, the operator certification option would not adequately ensure that crane operators could operate their equipment safely. They said a certified operator would need additional training, experience, and evaluation, beyond the training and evaluation required to obtain certification, to ensure that he or she could operate a crane safely.

OSHA also received information that two of a total of four) accredited testing organizations have been issuing certifications only by “type” of crane, rather than by the “type and capacity” of crane, as the crane standard requires. As a result, those certifications do not meet the standard’s requirements and operators who obtained certifications from only those organizations cannot, under OSHA’s crane standard, operate cranes on construction sites after the new requirements become effective.

Some stakeholders in the crane industry requested that OSHA remove the capacity requirement.

Most of the participants in the stakeholder meetings expressed the
opinion that an operator’s certification by an accredited testing organization did not mean that the operator was fully competent or experienced to operate a crane safely on a construction work site. The participants likened operator certification to a new driver’s license, or a learner’s permit, to drive a car. Most participants said that the operator’s employer should retain the responsibility to ensure that the operator was qualified for the particular crane work assigned. Some participants wanted certification to be, or viewed to be, sufficient to operate a crane safely. Stakeholders noted that operator certification was beneficial in establishing a minimum threshold of operator knowledge and familiarity with cranes.

D. Three-Year Extension

In order to address the issues raised by industry stakeholders after publication of the final rule, OSHA proposed a rule delaying the compliance date for the operator certification requirements of the crane standard, and extending the employer duty to ensure that the operator was qualified for the particular crane work assigned, by three years until November 10, 2014. (79 FR 7611). Subsequently, OSHA conducted a hearing on the rulemaking on May 19, 2014, gathering more comments on the proposed extension (OSHA—2007–0066–0521).

On September 26, 2014, OSHA issued a final rule delaying the compliance date for operator certification for three years until November 10, 2017. (79 FR 57785). After publication of the final rule, OSHA began conducting site visits with a variety of stakeholders and the Agency drafted regulatory text with the purpose of addressing the capacity issue and the employer duty concerns.

On March 31 and April 1, 2015, OSHA convened a special meeting of Advisory Committee on Construction Safety and Health in which both ACCSH members and non-member industry stakeholders provided feedback on the draft regulatory text. Prior to the meeting, OSHA made available the draft regulatory text, an overview of the draft regulatory text, and a summary of the site visits with stakeholders. OSHA received many comments and suggestions for revising the regulatory text at the ACCSH meeting. Since that meeting, the Agency has worked to re-draft the regulatory text and preamble for the proposed rule. To ensure the Agency has enough time to propose and finalize the rulemaking, OSHA is proposing this one-year extension of the certification requirement compliance date. Just as with the previous extension, OSHA is also proposing an extension of the existing employer assessment duty for the same time period.

E. Explanation of Proposed Action and Request for Comment

The effective dates of the operator certification requirement and the other “phase in” of employer duties are in 29 CFR 1926.1427(k)(1). The Agency is proposing to revise § 1427(k)(1) to delay the deadline for operator certification by one year from November 10, 2017, to November 10, 2018, to provide additional time for the Agency to propose and finalize a rulemaking that addresses stakeholders’ concerns. The Agency also is proposing to extend the current employer duties in § 1926.1427(k)(2)(i) and (ii) to ensure there is no reduction in worker protection during this three-year period. When OSHA included these employer duties in the final crane standard in 2010, these duties were to be a “phase in” to certification (75 FR 48027). By extending the date to November 10, 2018, as proposed in this notice, the requirements would continue to serve that purpose and preserve the status quo.

Without an extension, the certification requirements from the crane standard will prevent operators without certification by crane capacity from operating cranes, potentially disrupting the construction industry by creating a large number of crane operators without compliant certifications. Without the extension, after November 10, 2017, there would not be any duty for employers to ensure that their operators are competent to operate the equipment safely. This could diminish the effectiveness of the final rule which OSHA previously estimated to prevent 22 fatalities per year (75 FR 47914).

OSHA seeks comment on this approach, including the duration of the proposed extension of the operator certification deadline and the existing employer duties. OSHA encourages commenters to include a rationale for any alternatives that they propose. OSHA is also comment on the “Agency Determinations” section that follows, including the preliminary economic analysis, paperwork requirements, and other regulatory impacts of this rule on the regulated community.

II. Agency Determinations

A. Preliminary Economic Analysis and Regulatory Flexibility Analysis

When it issued the final crane rule in 2010, OSHA prepared a final economic analysis (2010 FEA) as required by the Occupational Safety and Health Act of 1970 (OSH Act; 29 U.S.C. 651 et seq.) and Executive Orders 12866 (58 FR 51735) (Sept. 30, 1993) and 13563 (76 FR 3821 [Jan. 21, 2011]). OSHA also published a Final Regulatory Flexibility Analysis as required by the Regulatory Flexibility Act (5 U.S.C. 601–612). On September 26, 2014, the Agency included a separate FEA (2014 FEA) when it published a final rule delaying until November 10, 2017, the deadline for all crane operators to become certified, and extending the employer duty to ensure operator competency for the same period (79 FR 57785). The preliminary economic analysis (PEA) for this rulemaking relies on the methodology of the 2014 FEA, which in turn is based on estimates from the 2010 FEA, along with public comments and testimony and other documents in the 2014 rulemaking record. In this document OSHA has summarized some of the information from the 2014 FEA and noted where the current analysis differs from the previous FEA. Additional background on the analysis in this PEA may be found in the 2014 FEA.

Because OSHA estimates this rule will have a cost savings for employers of $4.4 million using a discount rate of 3 percent for the one year of the extension, this final rule is not economically significant within the meaning of Executive Order 12866, or a major rule under the Unfunded Mandates Reform Act or Section 804 of the Small Business Regulatory Enforcement Fairness Act of 1996 (5 U.S.C. 801 et seq.).

This PEA focuses solely on costs, and not on any changes in safety and benefits resulting from extending the certification deadline and the employer duties under § 1926.1427(k)(2). OSHA previously provided its assessment of the benefits of the crane standard in the 2014 FEA of that standard. As noted elsewhere in this preamble, the primary rationale for this proposal is to maintain the status quo—including preservation of the employer duty to ensure that crane operators are competent—while providing OSHA additional time to conduct rulemaking on the crane.
operator requirements in response to stakeholder concerns.

Extending the employer’s requirement to ensure an operator’s competency during this period means taking the same approach of the previous extension: Continuing measures in existence since OSHA published the crane standard in 2010. As OSHA stated in the preamble to the 2010 final rule, the interim measures in paragraph (k) “are not significantly different from requirements that were effective under subpart N of this part at former § 1926.550. § 1926.21(b)(2) (the employer shall permit only those employees qualified by training or experience to operate equipment and machinery’), and § 1926.21(b)(2) (‘the employer shall instruct each employee in the recognition and avoidance of unsafe conditions . . . ‘)” (75 FR 48027).

Delaying the operator certification requirement defers a regulatory requirement and produces cost savings for employers. There will, however, be continuing employer costs for extending the requirement to assess operators under existing § 1926.1427(k)(2); if OSHA does not extend these requirements, they will expire on November 10, 2017, and employers would not incur these costs after 2017. With the extension, these continuing employer costs will be offset by a reduction in expenses that employers would otherwise have been required to incur to ensure that their operators are certified before the existing November 2017 deadline.

Overview

In the following analysis, OSHA examines costs and savings to determine the net economic effect of the rule. By comparing the additional assessment costs to the certification cost savings across two scenarios—scenario 1 in which there is no extension of the 2017 deadline, and scenario 2 in which there is an extension until 2018—OSHA estimates that the extension will produce a net savings for employers of $4.4 million per year using a discount rate of 5 percent ($5.2 million per year using an interest rate of 7 percent).

OSHA’s analysis follows the steps below to reach its estimate of an annual net $4.4 million in savings:

1. Estimate the annual assessment costs for employers;
2. Estimate the annual certification costs for employers; and
3. Estimate the year-by-year cost differential for extending the certification deadline to 2018.

The methodology used here is substantially the same as used in the 2014 extension FEA. Table 1 below summarizes these costs and the differentials across the two scenarios. The major differences are updated wages and a revised forecast of the composition of the operator pool across certification levels. The 2014 FEA analysis addressed a 3-year extension, so it gradually increased the number of operators without any certification during that period. The model in this PEA addresses an extension of just a single year, so it holds the number of operators with each certification level constant. The latter significantly simplifies the analysis versus that presented in the 2014 FEA extension.

a. Annual Assessment Costs

OSHA estimated the annual assessment costs using the following three steps: First, determine the unit costs of meeting this requirement; second, determine the number of assessments that employers will need to perform in any given year (this determination includes estimating the affected operator pool as a preliminary step); and finally, multiply the unit costs of meeting the requirement by the number of operators who must meet it in any given year.

Unit assessment costs. OSHA’s unit cost estimates for assessments take into account the time needed for the assessment, along with the wages of both the operator and the personnel who will perform the assessment. OSHA based the time requirements on crane operator certification exams currently offered by nationally accredited testing organizations. OSHA determined the time needed for various certification tests from the 2014 extension, drawing primarily from the public stakeholder meetings.

The Agency estimates separate assessment costs for three types of affected operators, which together comprise all affected operators: Those who have a certificate that is in compliance with the existing crane standard; those who have a certificate that is not in compliance with the existing crane standard; and those who have no certificate. As it did in the previous extension, OSHA uses certification status as a proxy of competence in estimating the amount of assessment time needed for different operators. OSHA expects that an operator already certified to operate equipment of a particular type and capacity will require less assessment time than an operator certified by type but not capacity, who in turn will require less time than an operator who is not certified. In deriving these estimates, OSHA determined that operators who have a certificate that is compliant with the crane standard would have to complete a test that is the equivalent of the practical part of the standard crane operator test. The Agency estimates that it would take an operator one hour to complete this test. Operators who have a certificate that is not in compliance with the crane standard would have to complete a test that is equivalent to both a written general test and a practical test of the standard crane operator test. OSHA estimated that the written general test would take 1.5 hours to complete, for a total test time of 2.5 hours of testing for each operator (1.5 hours for the written general test and 1.0 hour for the practical test). Finally, operators with no certificate would have to complete a test that is equivalent to the standard written test for a specific crane type (also lasting 1.5 hours), as well as the written general test and the practical test, for a total test time of 4.0 hours (1.5 hours for the test on a specific crane type, 1.5 hours for the written general test, and 1.0 hour for the practical test).

The wages used for the crane operator and assessor come from the BLS Occupational Employment Survey for May 2016 (BLS 2017a) which is an updated version of the same source used in the 2014 extension. From this survey a crane operator’s (Standard Occupational Classification (SOC) 53–7021 Crane and Tower Operators) average hourly wage is $26.58. The full cost to the employer includes all benefits as well as the wage. From the BLS Employer Costs For Employee Compensation for December 2016 (BLS 2017b) the average percentage of benefits in total for the construction sector is 30.2%, giving a markup of the wage to the total compensation of 1.43
(1/(1–0.302)). Hence the “loaded” total hourly cost of an operator is $38.08 ($26.58 × 1.43), including a markup for benefits.\(^8\) Relying on the same sources, the wage of the assessor is estimated to be the same as the average wage of a construction supervisor (53–1031 First-Line Supervisors of Transportation and Material-Moving Machine and Vehicle Operators) of $28.75, while the total hourly wage is $41.19 (1.43 × $28.75). Below these total hourly costs will be referred to as the respective occupation’s “wage.” For assessments performed by an employer of a prospective employee (i.e., a candidate), OSHA uses these same operator and assessor wages and the above testing times to estimate the cost of assessing prospective employees.

Multiplying the wages of operators, assessors, and candidates by the time taken for each type of assessment provides the cost for each type of assessment. Hence, the cost of assessing an operator already holding a certificate that complies with the standard (both type and capacity) is one hour of both the operator’s and assessor’s time: $79.27 ($38.08 + $41.19). For an operator with a certificate for crane type only (not crane capacity), the assessment time is 2.5 hours for a cost of $198.17 (2.5 × ($38.08 + $41.19)). Finally, for an operator with no certificate, the assessment time is 4.0 hours for a cost of $317.48 (4.0 × ($38.08 + $41.19)).

Besides these assessment costs, OSHA notes that § 1427(k)(2)(ii) requires employers to provide training to employees if they are not already competent to operate their assigned equipment. To determine whether an operator is competent, the employer must first perform an assessment. Only if an operator fails the assessment must the employer provide additional operator training required by § 1427(k)(2)(ii).

However, in determining this cost, OSHA made a distinction between a nonemployee candidate for an operator position and an operator who is currently an employee. For an employer assessing a nonemployee candidate, OSHA assumed, based on common industry practice, that the employer will not hire a nonemployee candidate who fails the assessment. In the second situation, an employee qualified to operate a crane fails a type and/or capacity assessment for a crane that differs from the crane the employee currently operates. In this situation, the cost-minimizing action for the employer is not to assign the employee to that type and/or capacity crane, thereby avoiding training costs. While the Agency acknowledges that there will be cases in which the employer will provide this training, it believes these costs to be minimal and, therefore, is not estimating costs for the training.

OSHA made the same determinations in the 2014 PEA and did not receive public comment on them.

**Number of assessments and number of affected operators.** The number of assessments is difficult to estimate due to the heterogeneity of the crane industry. Many operators work continuously for the same employer, already have had their assessment, and do not need reassessment, so the number of new assessments required by the crane standard for these operators will be zero. Some companies will rent both a crane and an operator employed by the crane rental company to perform crane work, in which case the rental crane company is the operator’s employer and responsible for operator assessment. In such cases there is no requirement for the contractor who is renting the crane service to conduct an additional operator assessment. Assuming that employers already comply with the assessment and training requirements of the existing § 1427(k)(2), employers only need to assess a subset of operators: New hires; employees who will operate equipment that differs by type and/or capacity from the equipment on which they received their current compliance; and operators who indicate they no longer possess the required knowledge or skill necessary to operate the equipment.

To calculate the estimated annual number of assessments, OSHA first estimated the current number of crane operators affected by the crane standard. The 2014 FEA estimated 117,130 operators and this PEA also uses this estimate. The Agency solicits comment and additional data on this estimate.

For the purpose of determining the number of assessments required each year under this proposal, OSHA is relying on the 23% turnover rate for operators originally identified in the 2008 PEA for the crane rule and used most recently in the extension 2014 FEA (79 FR 57793). This turnover rate includes all types of operators who would require assessment: Operators moving between employers; operators moving between different types and/or capacities of equipment; and operators newly entering the occupation. OSHA estimated the CY 2017 assessment costs for scenario 2 by multiplying the assessment numbers for each type of
operator by the unit costs, resulting in a cost of $6,624,861 (($79.27 \times 3,968) + ($198.17 \times 18,965) + ($317.08 \times 8,049)).

Under scenario 1, the employer-assessment requirement will be in effect for all of CY 2017, while employers would be gradually certifying all of their operators during CY 2017. As a result, the CY 2017 assessment costs identified for scenario 2 would decrease to $4,540,348 from $6,624,861 in scenario 1. This is because, as compared to scenario 2, there will be more operators who will have a compliant certificate, and therefore under the approach described above the employer assessment will require less time. This reduction in the estimated time, and therefore unit cost, lowers the overall assessment cost (see discussion in the 2014 deadline extension FEA for more details about this methodology).

Under both scenarios, once the 2010 rule comes into effect the employer duty to assess the crane operator no longer is in effect and so assessment costs are zero. Thus, in CY 2018, the assessment costs under scenario 1 would be zero. Under scenario 2, the assessment costs for CY 2018 would be the same as those under scenario 1 for CY 2017, because employers would be gradually certifying operators over the course of that year.

b. Annual Certification Costs

OSHA estimated the annual certification costs using the three steps: first, determine the unit costs of meeting this requirement; second, determine the number of affected operators; and, finally, multiply the unit costs of meeting the requirement by the number of operators who must meet them. In this PEA, following the same methodology as in the 2014 FEA, OSHA estimates that all certifications occur in the year prior to the deadline, hence in CY 2017 in scenario 1, while in CY2018 for the one-year extension in scenario 2. As in the annual assessment-cost analysis described above, OSHA provides the calculations for CY 2017 under the existing 2017 deadline (scenario 1), and then presents the certification costs for CY 2018 that would apply if OSHA extends the certification requirement to November 2018 (scenario 2).

Unit certification costs. Unit certification costs vary across the three different types of operators in the operator pool (operators with compliant certification; operators with type-only certification; and operators with no certification). Among operators without certification there is a further distinction with different unit certification costs: Experienced operators without certification and operators who have only limited experience. Therefore, there are different unit certification costs for four different types of operators. There also are ongoing certification costs due to the following two conditions: The requirement for re-certification every five years and the need for some certified operators to obtain additional certification to operate a crane that differs by type and/or capacity from the crane on which they received their current certification.

OSHA estimated these different unit certification costs using substantially the same unit-cost assumptions used in the FEA for the 2010 crane standard and (and exactly the same as the FEA of the 2014 deadline extension.) In those previous FEAs, OSHA estimated that training and certification costs for an operator with only limited experience would consist of $1,500 for a 2-day course (including tests) and 18 hours of the operator’s time, for a total cost of $2,185.44 ($1,500 + (18 hours \times $38.08)) (see 75 FR 48096–48097). OSHA continues to use a cost of $250 for the tests taken without any training (a constant fixed fee irrespective of the number of tests (75 FR 48096)), and the same number of hours used for each test that it used in the assessment calculations provided above (which the Agency based on certification test times). Accordingly, OSHA estimates the cost of a certificate compliant with the standard for an operator who has a type-only certificate to be $345.20 (i.e., 1 type/capacity-specific written test at 1.5 hours and 1 practical test at 1.0 hours (2.5 hours total), plus the fixed $250 fee for the tests (2.5 hours \times $38.08) + $250). For an experienced operator with no certificate, the cost is $402.32 (i.e., the same as the cost for an operator with a type-only certificate plus the cost of an added general written test of 1.5 hours (4.0 hours \times $38.08) + $250).9

For Scenario 1, § 1926.1427(b)(4) specifies that a certificate is valid for five years. OSHA estimates the recertification unit cost would be the same as the assessment for an operator with compliant certification (i.e., $79.27). In the 2014 extension, OSHA assumed that employers would pay a reduced fee for the recertification testing as opposed to the cost of a full first-time examination. Because OSHA lacked data on exactly how much the fee would be reduced, it used the assessment cost as a proxy for the cost of recertification (79 FR 57794). OSHA did not receive any comment on that approach and is retaining it for this rulemaking.

Finally, there will be certified operators who must obtain certification when assigned to a crane that differs by type and/or capacity from the crane on which they received their current certification. This situation requires additional training, but less training than required for a “new” operator with only limited experience. Accordingly, OSHA estimated the cost for these operators as one half of the cost of training and certifying a new operator, or $1,092.72 ($2,185.44/2).

Number of certifications. After establishing the unit certification costs, OSHA had to determine how many certifications are necessary to ensure compliance with OSHA’s standard. In doing so, the Agency uses the 5% new-hire estimate from the FEA discussed above to calculate the number of new operators; therefore, of the 117,130 operators affected by the standard, 5,857 (0.05 \times 117,130) would be new operators who would require two days for training and certification each year. As discussed earlier, OSHA estimated that 71,700 operators have type-only certification, 15,000 operators have certification that complies with the existing crane standard, and the remaining 24,574 operators (117,130 - (71,700 + 15,000 + 5,857)) are experienced operators without certification.

9 There are no certification costs for operators who already have a certificate that complies with the crane standard.
Under scenario 1 (no extension), after all operators attain certification by November 2017 there will still be ongoing certification costs each year. With a constant total number of operators, the same number of operators (5,857) will be leaving the profession each year and will not require recertification when their current 5-year certification ends. This leaves 117,274 operators (117,130 – 5,857) who will need such periodic recertification. If we approximate the timing of requirements for recertification as distributed proportionally across years, then 20% of all operators with a 5-year certificate (22,255 operators (.20 × 117,274)) would require recertification each year.

A final category of unit certification costs involves the continuing need for certified operators to obtain further certification when assigned to a crane that differs by type and/or capacity from the crane on which they received their current certification. This situation arises for both operators working for a single employer and operators switching employers.

The operators who will not need multiple certifications in the post-deadline period are operators with certification who move to a new employer and operate a crane with the same type and capacity as the crane on which they received certification while with their previous employer. These operators will not need multiple certifications because operator certifications are portable across employers, as specified by the crane standard (see §1427(b)(3)). For an employer looking to hire an operator for a specific crane, this option will minimize cost, and OSHA assumes employers will choose this option when possible.

After the certification deadline, OSHA estimates that each year 23% of the 117,130 operators (26,940 = 0.23 × 117,130) will enter the workforce, or take on new positions that require one or more additional certifications to operate different types and/or capacities of cranes. Of these 26,940 operators, OSHA estimates 5 of the total 23%, or 5,857 (0.05 × 117,130), will result from new operators entering the occupation each year; 9%, or 10,542 (0.09 × 117,130), will result from operators switching employers but operating a crane of the same type and capacity as the crane they operated previously (i.e., no certification needed because certification is portable in this case); and the remaining 9%, or 10,542, changing jobs or positions and requiring one or more additional certification to operate a crane that differs by type and/or capacity from the crane they operated previously. These percentages are identical to those in the 2014 FEA.

Annualized certification costs. To estimate the annual base cost for the first scenario, OSHA calculates the certification costs for CY 2017 because that is the remaining period before the existing deadline. The total cost for certifying all operators in CY 2017 in accordance with the existing crane standard using the above unit-cost estimates and numbers of operators is $47,436,368 ((71,700 operators with type-only certification × $345.20) + (24,574 experienced operators without certification × $402.32) + (5,857 operators with no experience or certification × $2,185.44)). The Agency, following the previous FEAs (75 FR 40996 and 70 FR 57795), annualized this cost for the five-year period during which operator certification remains effective, resulting in an annualized cost of $7,563,216. In section c below, OSHA uses this amount in calculating the annual certification costs under scenario 1.

To determine the annual amount used in calculations for the second scenario (the extension to 2018), OSHA examines the costs in CY 2017 because that is the first year with certification costs. All numbers are the same, just shifted forward a year, so the total cost for having all crane operators certified in CY 2018 is $47,436,368 (in 2018 dollars).

### TABLE 1—YEAR-BY-YEAR COST DIFFERENTIAL IF OSHA EXTENDS THE CERTIFICATION DEADLINE TO 2018

<table>
<thead>
<tr>
<th>Certification Year</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario 1 (no deadline extension)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>operators with non-compliant certification</td>
<td>71,700</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>operators with compliant certification</td>
<td>15,000</td>
<td>111,274</td>
<td>111,274</td>
<td>111,274</td>
<td>111,274</td>
<td>111,274</td>
<td>111,274</td>
</tr>
<tr>
<td>operators with no certification</td>
<td>24,574</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>new operators</td>
<td>5,857</td>
<td>5,857</td>
<td>5,857</td>
<td>5,857</td>
<td>5,857</td>
<td>5,857</td>
<td>5,857</td>
</tr>
</tbody>
</table>

10 A positive cost differential indicates cost savings and a negative cost differential indicates net costs. Savings in the first two years are due to the lower cost of assessments versus certification. Then net costs in year 2022 are due to the last year of annualized certification costs for scenario 2, while this cost ends in year 2021 for scenario 1.
OSHA next determined the present value of these cost differentials between the two scenarios. OSHA calculated the present value of future costs using two interest rates assumptions, 3 percent and 7 percent, which follow the OMB guidelines specified by Circular A-4. At an interest rate of 3 percent, the present value of the cost differentials for CY 2017 onwards results in an estimated savings of $20.2 million ($21.3 million using the 7 percent rate). Finally, annualizing the present value over five years results in an annualized cost differential (i.e., net employer cost savings) of $4.4 million per year ($5.2 million per year using the 7 percent rate).

The Agency notes that it did not include an overhead labor cost in the Preliminary Economic Analysis (PEA) for this rule. It is important to note that there is not one broadly accepted overhead rate and that the use of overhead to estimate the marginal costs of labor raises a number of issues that should be addressed before applying overhead costs to analyze the costs of any specific regulation. There are several approaches to look at the cost elements that fit the definition of overhead and there are a range of overhead estimates currently used within the federal government—for example, the Environmental Protection Agency has used 17 percent, 11 and government contractors have been reported to use an average of 77 percent. 12, 13 Some overhead costs, such as advertising and marketing, may be more closely correlated with output rather than with labor. Other overhead costs vary with the number of new employees. For example, rent or payroll processing costs may change little with the addition of 1 employee in a 500-employee firm, but those costs may change substantially with the addition of 100 employees. If an employer is able to rearrange current employees’ duties to implement a rule, then the marginal share of overhead costs such as rent, insurance, and major office equipment (e.g., computers, printers, copiers) would be very difficult to measure with accuracy (e.g., computer use costs associated with 2 hours for rule familiarization by an existing employee).

If OSHA had included an overhead rate when estimating the marginal cost of labor, without further analyzing an appropriate quantitative adjustment, and adopted for these purposes an overhead rate of 17 percent on base wages, as was done in a sensitivity analysis in the PEA in support of OSHA’s 2016 final rule on Occupational Exposure to Respirable Crystalline Silica, the overhead costs would increase cost savings from $4.4 million to $4.5 million at a discount rate of 3 percent, an increase of 1.8 percent, and would increase cost savings from $5.2 million to $5.3 million at a discount rate of 7 percent, an increase of 1.9 percent.

d. Certification of No Significant Impact on a Substantial Number of Small Entities

Most employers will have savings resulting from the one-year extension, particularly employers that planned to pay for operator certification in the year before the existing 2017 deadline. The only entities likely to see a net cost will be entities that planned to hire an operator with compliant certification after November 10, 2017. Without the one-year extension, these entities will have no separate assessment duty, but under the one-year extension they will have the expense involved in assessing operator competency. As noted above, however, OSHA estimated the maximum cost for such an assessment (for operators with no certification) to be $317.08 per certified operator.

Small businesses will, by definition, have few operators, and OSHA believes the $317.08 cost will be well below 1% of revenues, and well below 5% of profits, in any industry sector using cranes. OSHA does not consider such small amounts to represent a significant impact on small businesses in any industry sector. Hence, OSHA certifies this final rule will not have a significant impact on a substantial number of small

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entities. After providing relatively similar estimates in the 2014 FEA, OSHA made the same certification in the 2014 FEA and did not receive any adverse comment on either the certification or its underlying rationale.

B. Paperwork Reduction Act

When OSHA issued the final rule on August 9, 2010, it submitted an Information Collection Request (ICR) to the Office of Management and Budget (OMB) titled Cranes and Derricks in Construction (29 CFR part 1926, subpart CC).\(^{14}\) On November 1, 2010, OMB approved the ICR under OMB Control Number 1218–0261, with an expiration date of November 30, 2013. On April 25, 2017, OMB’s approval of the ICR was extended to April 30, 2020.

This proposed rule contains no collection of information needing OMB approval. OSHA welcomes commenters to submit their comments on this determination to the rulemaking docket (OSHA–2007–0066), along with their other comments on the proposed rule. For instructions on submitting these comments to the docket, see the sections of this Federal Register notice titled DATES and ADDRESSES.

OSHA notes that a Federal agency cannot conduct or sponsor a collection of information unless OMB approves it under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.), and the agency displays a currently valid OMB control number. The public need not respond to a collection of information requirement unless the agency displays a currently valid OMB control number, and, notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information requirement if the requirement does not display a currently valid OMB control number.

C. Federalism

OSHA reviewed this proposed rule in accordance with the Executive Order on Federalism (Executive Order 13132, 64 FR 43255, August 10, 1999), which requires that Federal agencies, to the extent possible, refrain from limiting state policy options, consult with states prior to taking any actions that would restrict state policy options, and take such actions only when clear constitutional authority exists and the problem is national in scope. Executive Order 13132 provides for preemption of state law only with the expressed consent of Congress. Federal agencies

\(^{14}\) The ICR is available at ID–0425 at www.regulations.gov and at www.reginfo.gov (OMB Control Number 1218–0261).

must limit any such preemption to the extent possible.

Under Section 18 of the Occupational Safety and Health Act of 1970 (OSH Act; 29 U.S.C. 651 et seq.), Congress expressly provides that states and U.S. territories may adopt, with Federal approval, a plan for the development and enforcement of occupational safety and health standards. OSHA refers to such states and territories as “State Plan States.” Occupational safety and health standards developed by State Plan States must be at least as effective in providing safe and healthful employment and places of employment as the Federal standards. 29 U.S.C. 667. Subject to these requirements, State Plan States are free to develop and enforce under state law their own requirements for safety and health standards.

OSHA previously concluded from its analysis that promulgation of subpart CC complies with Executive Order 13132 (75 FR 48128–29). In states without an OSHA-approved State Plan, any standard developed from this proposed rule would limit state policy options in the same manner as every standard promulgated by OSHA. For State Plan States, Section 18 of the OSH Act, as noted in the previous paragraph, permits State-Plan States to develop and enforce their own crane safety standards provided these requirements are at least as effective in protecting workers and healthful employment and places of employment as the requirements specified in this proposal.

D. State Plans

When Federal OSHA promulgates a new standard or more stringent amendment to an existing standard, State Plans must amend their standards to reflect the new standard or amendment, or show OSHA why such action is unnecessary, e.g., because an existing state standard covering this area is “at least as effective” as the new Federal standard or amendment (29 CFR 1953.5(a)). The state standard must be at least as effective as the final Federal rule. State Plans must adopt the Federal standard or complete their own standard within six months of the promulgation date of the final Federal rule. When OSHA promulgates a new standard or amendment that does not impose additional or more stringent requirements than an existing standard, State Plans do not have to amend their standards, although OSHA may encourage them to do so. The 21 states and 1 U.S. territory with OSHA-approved occupational safety and health plans covering private sector and state and local government are: Alaska, Arizona, California, Hawaii, Indiana, Iowa, Kentucky, Maryland, Michigan, Minnesota, Nevada, New Mexico, North Carolina, Oregon, Puerto Rico, South Carolina, Tennessee, Utah, Vermont, Virginia, Washington, and Wyoming. Connecticut, Illinois, Maine, New Jersey, New York, and the Virgin Islands have OSHA-approved State Plans that apply to state and local government employees only.

The proposed amendments to OSHA’s crane standard preserve the status quo and would not impose any new requirements on employers. Accordingly, State Plans would not have to amend their standards to delay the effective date of their operator certification requirements, but they may do so if they so choose. However, if they choose to delay the effective date of their certification requirements, they also would need to include a corresponding extension of the employer duty to assess and train operators that is equivalent to § 1427(k)(2).

E. Unfunded Mandates Reform Act

When OSHA issued the final rule for cranes and derricks in construction, it reviewed the rule according to the Unfunded Mandates Reform Act of 1995 (UMRA; 2 U.S.C. 1501 et seq.) and Executive Order 13132 (64 FR 43255 (Aug. 10, 1999)). OSHA concluded that the final rule did not meet the definition of a “Federal intergovernmental mandate” under the UMRA because OSHA standards do not apply to state or local governments except in states that voluntarily adopt State Plans. OSHA further noted that the rule imposed costs of over $100 million per year on the private sector and, therefore, required review under the UMRA for those costs, but that its final economic analysis met that requirement.

As discussed above in Section IV.A (Preliminary Economic Analysis and Regulatory Flexibility Analysis) of this preamble, this proposed extension does not impose any costs on private-sector employers beyond those costs already identified in the final rule for cranes and derricks in construction and the 2014 extension. Because OSHA reviewed the total costs of this final rule under the UMRA, no further review of those costs is necessary. Therefore, for the purposes of the UMRA, OSHA certifies that this proposed rule does not mandate that state, local, or tribal governments adopt new, unfunded regulatory obligations, or increase expenditures by the private sector of more than $100 million in any year.
F. Consultation and Coordination With Indian Tribal Governments

OSHA reviewed this proposed rule in accordance with Executive Order 13175 (65 FR 67249) and determined that it does not have "tribal implications" as defined in that order. As proposed, the rule does not have substantial direct effects on one or more Indian tribes, on the relationship between the Federal government and Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes.

G. Consultation With the Advisory Committee on Construction Safety and Health

Under 29 CFR parts 1911 and 1912, OSHA must consult with the Advisory Committee on Construction Safety and Health (ACCSH or Committee), established pursuant to Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3701 et seq.), in setting standards for construction work. Specifically, § 1911.10(a) requires the Assistant Secretary to provide the ACCSH with a draft proposed rule (along with pertinent factual information) and give the Committee an opportunity to submit recommendations. See also § 1912.3(a) ("[W]hen occupational safety or health standards for construction activities are proposed, the Assistant Secretary [for Occupational Safety and Health] shall consult the Advisory Committee").

On June 20, 2017, ACCSH unanimously recommended that OSHA delay, for one additional year until November 10, 2018, the compliance date for the crane operator certification and extend the employer duty for the same period. [Include citation to ACCSH docket, OSHA–2017–0007–0001]

H. Executive Order 13771: Reducing Regulation and Controlling Regulatory Costs

Consistent with EO 13771 (82 FR 9339, February 3, 2017), OSHA has estimated the annualized cost savings over 10 years for this proposed rule to range from $4.4 million to $5.2 million, depending on the discount rate. This proposed rule is expected to be an EO 13771 deregulatory action. Details on the estimated cost savings of this proposed rule can be found in the rule’s economic analysis.

I. Legal Considerations

The purpose of the Occupational Safety and Health Act of 1970 (29 U.S.C. 651 et seq.) 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 goal, Congress authorized the Secretary of Labor to promulgate and enforce occupational safety and health standards. 29 U.S.C. 654(b), 655(b). A safety or health standard is a standard “which requires conditions, or the adoption or use of one or more practices, means, methods, operations, or processes, reasonably necessary or appropriate to provide safe or healthful employment or places of employment.” 29 U.S.C. 652(8). A standard is reasonably necessary or appropriate within the meaning of Section 652(8) when a significant risk of material harm exists in the workplace and the standard would substantially reduce or eliminate that workplace risk. See Industrial Union Department, AFL–CIO v. American Petroleum Institute, 448 U.S. 607 (1980). In the crane rulemaking, OSHA made such a determination with respect to the use of cranes and derricks in construction (75 FR 47913, 47920–21). This proposed rule does not impose any new requirements on employers. Therefore, this proposal does not require an additional significant risk finding (see Edison Electric Institute v. OSHA, 849 F.2d 611, 620 (D.C. Cir. 1988)).

In addition to materially reducing a significant risk, a safety standard must be technologically feasible. See UAW v. OSHA, 37 F.3d 665, 668 (D.C. Cir. 1994). A standard is technologically feasible when the protective measures it requires already exist, when available technology can bring the protective measures into existence, or when that technology is reasonably likely to develop [see American Textile Mfrs. Institute v. OSHA, 452 U.S. 490, 513 (1981); American Iron and Steel Institute v. OSHA, 939 F.2d 975, 980 (D.C. Cir. 1991)]. In the 2010 Final Economic Analysis for the crane standard, OSHA found the standard to be technologically feasible (75 FR 48079). OSHA also found the previous extension to be technologically feasible (79 FR 57798). This proposed rule would, therefore, be technologically feasible as well because it would not require employers to implement any additional protective measures; it would simply extend the duration of existing requirements.

List of Subjects in 29 CFR Part 1926

Construction industry, Cranes, Derricks, Occupational safety and health, Safety.