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DEPARTMENT OF LABOR

Occupational Safety and Health Administration

29 CFR Part 1926

[Docket ID-OSHA-2007-0066]

RIN 1218-AC96

Cranes and Derricks in Construction: Operator Certification Extension

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

ACTION: Final rule.

SUMMARY: OSHA is delaying its deadline for employers to ensure that crane operators are certified by one year until November 10, 2018. OSHA is also extending its employer duty to ensure that crane operators are competent to operate a crane safely for the same one-year period.

DATES: This final rule is effective on November 9, 2017.

ADDRESSES: In accordance with 28 U.S.C. 2112(a)(2), the Agency designates Ann Rosenthal, Associate Solicitor of Labor for Occupational Safety and Health, Office of the Solicitor, Room S-4004, U.S. Department of Labor, 200 Constitution Avenue, NW., Washington, DC 20210, to receive petitions for review of the final rule.

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

SUPPLEMENTARY INFORMATION:

I. Background

A. Introduction

OSHA is publishing this final rule to further extend by one year the employer duty to ensure the competency of crane operators involved in construction work. Previously this duty was scheduled to terminate on November 10, 2017, but now continues until November 10, 2018. OSHA also is further delaying the deadline for crane operator certification for one year from November 10, 2017, to November 10, 2018. As explained in more detail in the following Regulatory Background section, the extension and delay are necessary to provide sufficient time for OSHA to complete a related rulemaking to address issues with its existing Cranes and Derricks in Construction standard (29 CFR part 1926, subpart CC, referred to as "the crane standard" hereafter) (75 FR 47905).

In establishing the effective date of this action, the Agency finds good cause pursuant to 5 U.S.C. 553(d)(3) of the Administrative Procedure Act that this rule be made effective on November 9, 2017, rather than delaying the effective date for 30 days after publication. The basis for this finding is that it is unnecessary to delay this effective date to provide an additional period of time for employers to comply with a new requirement because OSHA is extending the status quo. This final rule establishes no new burdens on the regulated community; rather, it further delays implementation of the crane operator certification requirements in the crane standard and further extends the employer duty in

the crane standard to ensure the competency of crane operators, a duty that employers have been required to comply with since publication of the crane standard in 2010.

OSHA also concludes that delaying the effective date of this extension rulemaking beyond November 9, 2017, would be contrary to the public interest and would significantly disrupt the construction industry. If the extension does not go into effect on November 9, 2017, the crane operator certification requirements in the 2010 crane standard would go into effect and the employer duty in the crane standard to ensure crane operator competency would end. As the Agency notes below in Section II.A (Extension of operator certification deadline), there is evidence in the record that many crane operators in the construction industry do not have the certification required by the crane standard and would be out of compliance with the standard. This would not be offset through the employer duty to ensure crane operator competency because that duty would no longer exist. Therefore, OSHA concludes that it is in the public interest to avoid such disruption by having this extension go into effect by November 9, 2017. Finally, OSHA notes that by delaying the operator certification deadline, OSHA is temporarily relieving the regulated community of a compliance duty, which under 5 U.S.C. 553(d)(1)) is a separate basis for allowing a rule to become effective in less than 30 days.

By delaying the deadline for employers to ensure that crane operators are certified until November 10, 2018, and by extending the employer duty to ensure that crane operators are competent until that same date, this rule will avoid disrupting the construction industry and allow OSHA time to complete a related crane standard rulemaking that will address these and other issues.

In this preamble, OSHA cites to documents in Docket No. OSHA-2007-0066, the docket for this rulemaking. To simplify these document cites, they start with “ID” followed by the last four digits of their full docket identification number. For example, if a document’s full docket identification number is ID-OSHA-2007-0066-1234, the cite used in this preamble would be ID-1234. The docket is available at <http://www.regulations.gov>, the Federal eRulemaking Portal.

B. Summary of Economic Impact

This final rule is not economically significant. OSHA is revising 29 CFR 1926.1427(k) (competency assessment and training) to delay the deadline for compliance with the operator-certification requirement in the crane standard for one year, and to extend the existing employer duty to ensure crane operator competency for the same period. OSHA’s final economic analysis shows that delaying the date for operator certification and extending the employer’s assessment of crane operator competency, rather than following the current crane standard, will result in a net cost savings for the affected industries. Delaying the compliance date for operator certification results in estimated 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 final economic analysis is in the “Agency Determinations” section of this preamble.

C. Regulatory Background

1. Operator Certification Options

On August 9, 2010, OSHA published the final crane standard. OSHA developed the standard through a negotiated rulemaking process. The Agency 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 Agency initiated a Small Business Advocacy Review Panel in 2006 and published the proposed rule for cranes in construction on October 9, 2008 (73 FR 59713). It closely followed C-DAC's draft proposal (73 FR 59718). OSHA received public comment on the proposal, and conducted a public hearing. Among many other provisions, OSHA's 2010 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, OSHA requires employers to ensure that their crane operators complete at least one of the following:

- 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; or
- Option 4. Compliance with qualifying State or local licensing requirements (mandatory when applicable).

The third-party certification option in §1926.1427(b)—Option 1—is the only certification option that is “portable,” meaning 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

available to all employers; it is the option 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, an independent testing organization tests crane operators to determine if they warrant certification. Before a testing organization can issue operator certifications, §1926.1427(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.

Section 1926.1427(b)(2) of the 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 crane standard published in 2010 replaced provisions in 29 CFR part 1926, subpart N--Cranes, Derricks, Hoists, Elevators, and Conveyors, of the construction safety standards. OSHA delayed the deadline for the operator certification requirement for four years, until November 10, 2014 (see §1926.1427(k)(1)). During this four-year “phase-in” period, the crane standard imposed an employer duty to ensure that crane operators could safely operate equipment (see §1926.1727(k), Phase-in). Thus, pursuant to §1926.1427(k)(2)(i), OSHA required employers to “ensure that operators of equipment covered by this standard are competent to operate the equipment safely.” Under §1926.1427(k)(2)(ii), employers must train and evaluate the operator when the operator “assigned to operate machinery does not have the required knowledge or ability to operate the equipment safely.”

3. Post-Final Rule Developments

After OSHA issued the crane standard, 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 ID-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 at a construction site. They said that 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 offering different certifications by "type and capacity" of crane, as the crane standard requires. The two organizations later confirmed this (ID-0521, p. 109 and 246). As a result, those certifications do not meet the standard's requirements and operators who obtained certifications only from those organizations could not, under OSHA's crane standard, operate cranes on construction sites after November 10, 2014. 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. Initial Extension of the Employer Assessment Duties and Deadline for Operator Certification

On February 10, 2014, OSHA published a proposal to delay the deadline for operator certification by three additional years to November 10, 2017, and to extend the existing employer duty to ensure crane operator competency for the same period (79 FR 7611). OSHA conducted a public hearing on May 19, 2014. Representatives of the construction industry reiterated that requiring the certification of all operators and supplanting the employer duty would not ensure the competency of crane operators to safely operate cranes to do construction work. A representative of one of the testing organizations that certifies by capacity (and who had previously opposed removing the capacity requirement) conceded that OSHA should undergo a rulemaking to consider removing capacity from certification requirements.

On September 26, 2014, OSHA published a final rule that delayed the operator certification deadline and extended the existing employer duty for three years to November 10, 2017, to provide time for OSHA to consider what regulatory approach it should take (79 FR 57785).

E. Consulting ACCSH--Draft Proposal for Revised Crane Operator Requirements

With the additional three-year extension in place, OSHA began work on a rulemaking to address the issues raised by stakeholders. On March 31 and April 1, 2015,

the Agency consulted with the Advisory Committee on Construction Safety and Health (ACCSH) to solicit feedback from industry stakeholders on the draft regulatory text for a revised operator certification standard.¹ Prior to the meeting, OSHA made available the draft regulatory text,² an overview of the draft regulatory text,³ and a summary of the site visits with stakeholders.⁴ 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 proposed this one-year extension of the certification requirement compliance date (82 FR 41184 (Aug. 30, 2017)). As with the previous extensions, OSHA also proposed an extension of the existing employer assessment duty for the same time period (Id.). OSHA requested public comment on these proposals.

II. Summary and explanation of the final rule.

Commenters in their written remarks on the proposal to delay the operator certification deadline and extend the existing employer duty to November 10, 2018 focused on three issues arising from the Agency's proposed changes: 1) whether to delay the date for crane operators to be certified; 2) whether to extend the employer duty to ensure crane operators are competent and safe; and 3) the length of time of an extension. This section examines these issues—in the order above—by first summarizing the

¹ Transcript for March 31: https://www.osha.gov/doc/accsh/transcripts/accsh_20150331.pdf; transcript for April 1: https://www.osha.gov/doc/accsh/transcripts/accsh_20150401.pdf.

² <https://www.osha.gov/doc/accsh/accshcrane.pdf>.

³ https://www.osha.gov/doc/accsh/proposed_crane.html.

⁴ https://www.osha.gov/doc/accsh/summary_crane.html.

comments and then explaining the Agency's decisions and determinations based on the record as a whole.

A. Extension of operator certification deadline

The majority of commenters supported the Agency's proposed extension of the deadline for crane operators to be certified (ID-0545, 0561, 0563, 0566, 0572-575, 0578-582, 0584-585, 0588-597, 0599-614, 0617-618, 0621, 0624-627, 0632-640, 0642-643, 0645-647, 0651, 0653, 0656-660, 0662-664, 0666-667). Most agreed that an extension was necessary to give OSHA time to address the issues regarding crane operation raised after publication of the crane standard: whether to remove capacity from the crane standard's certification requirements and the preservation of the employer's role in assessing operators for safe crane operation (ID-0561, 0563, 0578, 0597, 0604, 0618, 0632, 0636, 0640, 0646-647, 0650-651, 0656, 0658, 0667). The National Commission for the Certification of Crane Operators (NCCCO) supports this rule "only in response to OSHA's stated need to address these two issues." (ID-0632). In support of the extension, The International Union of Operating Engineers (IUOE) stated that they along with "contractors, insurers, trade associations, and third-party certification bodies agree on the problems OSHA has identified . . . that OSHA's 'deemed qualified' language eliminates the employer's duty . . ." and "that certification by 'capacity' should be eliminated from the regulatory requirements." (ID-0651). They conclude that "[t]here is widespread agreement in the industry regarding the necessity to postpone implementation of these two elements of the rule in order to correct them." (Id.).

Some commenters asked OSHA to delay the compliance date of the certification requirements in order to alleviate confusion that exists in the industry

regarding the crane operator certification requirements. (ID-0604, 0606, 0642, 0647, 0650-651). In support of the extension, the IUOE asked OSHA to “move quickly to eliminate the cloud of uncertainty that has hung over this key safety measure for over a decade.” (ID-0651). Edison Electrical Institute hopes that “OSHA works to clarify and formulate the necessary requirements for operator certification and qualification under the final rule” as “[t]here are still many questions that require answers on the certification process and granting this extension will enable OSHA to continue its work with impacted parties to ensure compliance is met and clarity is achieved.” (ID-0642). Imperial Crane Services, Inc., and the Chicago Crane Owners Association support the extension “so that crane operator's proficiency/qualification can be further clarified in the existing cranes and derrick standard.” (ID-0604).

Commenters were also very concerned that without an extension of the operator certification requirements and the employer's duty, there would be significant disruption to the construction industry. (ID-0561, 0580, 0605, 0611, 0618, 0626-627, 0636, 0640, 0643, 0646, 0650). In the 2014 extension, OSHA noted that the record indicated that roughly two-thirds of certified operators were certified by one of the organizations that does not offer certification by capacity. Thus, some of the commenters observed that with a majority of certified operators possessing a certification by crane type only, many employers of crane operators would be in violation of operating a crane under OSHA requirements and barred from operating a crane without the possibility of being cited by OSHA. The Texas Crane Owners Association asserts that without an extension, “the obligations under [the crane standard] will undoubtedly disrupt the construction industry by creating a large number of crane operators without compliant certification.” (ID-

0646). The Associated General Contractors of America agrees that failure to delay the compliance date “could potentially result in significant disruptions in the construction industry with the number of crane operators in possession of certifications that would be deemed noncompliant if the November 10, 2017, effective date remains in place.” (ID-0640). Similarly, The Associated Builders and Contractors, Inc., (ABC) commented that “many in the construction industry believe that without an extension the industry will face a future crane operator shortage. For the industry to continue to perform work without disruption, it is important an extension is granted.” (ID-0650). “[W]ithout the proposed extension there will be a significant disruption to the industry come November 10, 2017,” commented North America’s Building Trades Unions, continuing that “many operators will no longer be able to operate certain cranes because their current certifications are not by crane capacity as currently called for in the rule.” (ID-0618).

Commenters opposed to the extension of the certification deadline expressed concern that it would lead to unsafe worksites. (ID-0557, 0562/0665 (duplicate comments), 0571, 0577, 0620, 0629, 0644, 0649, 0652). Jack Pitt of Murray State University commented that if OSHA delayed the compliance date, “then safety would not be a priority,” continuing that it was his opinion that requiring certification immediately “would eliminate quite a number of fatalities and injuries” (ID-0665 and 0562). Chas Scott of Murray State University commented that “[t]he longer the rule is delayed, the more fatalities that are likely to occur.” (ID-0557)⁵

⁵ This commenter misinterpreted OSHA’s previous benefits estimate, which stated that the cranes standard would prevent 22 fatalities per year, as meaning that the enforcement of the operator certification requirement would alone prevent that number of fatalities. But as OSHA noted in the 2014 extension in response to similar assertions, in calculating the benefits from fatalities prevented “OSHA did not identify individual components of the standard, but rather calculated the benefits of the entire cranes standard as a

In making their arguments about the impact of the certification deadline extension on safety, several of these comments equated crane operator training and crane operator certification. (ID-0571, 0577, 0620, 0629, 0644, 0649, 0652). OSHA had previously addressed the same issue in its 2014 extension, pointing out that for the requirements for crane operator training at 29 CFR 1926.1427(f), like the other provisions from the crane standard except certification, are currently in effect and would not be impacted by any extension (see 79 FR 57788). Employers currently have, and will continue to have, a responsibility to ensure crane operators they employ are trained according to that standard.

Other comments in opposition of the extension stated that employers have had enough time to make sure that their operators are certified, meeting the certification requirements of the 2010 final rule. (ID-0542, 0551, 0556, 0558, 0568, 0583, 0587, 0615-616, 0622-623, 0630-631, 0652, 0661). An anonymous commenter stated that “[s]afety conscious construction employers know or should have known of this new operator certification requirement and have been given a substantial amount of time to comply,” (ID-0551). Another commenter noted that employers of crane operators “have had seven years to get the new certification.” (ID-0661).

Based on the record as a whole, OSHA finds the arguments in favor of delaying the operator certification deadline to be more persuasive. OSHA shares the commenters’ concerns about a potential disruption to the industry that might occur if the majority of certified operators currently hold a form of certification that would not comply with OSHA’s standard. The impact on the industry would be particularly unwarranted in light

whole. OSHA did not separately itemize benefits accruing from the operator certification requirements.” (79 FR 57788, footnote 2).

of OSHA's public disclosure to ACCSH during the committee's meeting on March 31 and April 1, 2015, that the Agency intends to propose removing the capacity component of certification, which is the sole reason that most of these operator certifications would not comply with OSHA's standard. OSHA also acknowledges the commenters' point that while there has been time for more operators to become certified, many employers may have delayed in requiring their employees to be certified while they waited for OSHA to clarify the criteria for the certification so that they could avoid spending funds on a certification that would not meet OSHA's standard. To the extent that the Agency's actions have contributed to this uncertainty, OSHA agrees that it would not be fair to penalize employers by enforcing the certification requirement before completing the separate rulemaking to change that criteria. The additional one-year extension will provide the Agency with the time it needs to address those concerns.

B. Extension of the existing employer duty

The commenters who specifically addressed the extension of the existing employer assessment duty were unanimous in supporting the extension to ensure that employers retained responsibility for ensuring that their operators are competent to operate cranes. All of the comments opposed to the one-year extension focused entirely on certification and did not mention the employer duty.

The North America's Building Trades Union commented that "without the proposed extension there would not be an employer duty to ensure operators can safely operate equipment, which not only puts the operator at risk of fatality or injury, but also puts all construction workers around the equipment at risk as well as the general public on certain construction projects." (ID-0618). The IUOE argues that even if certification is

required, “[c]ertification alone . . . is simply insufficient in the absence of *subsequent employer qualification* to ensure that a crane operator is qualified to safely operate the crane to which he or she is assigned.” (ID-0651).

While OSHA is not prepared to make a determination whether certification alone is insufficient as the IUOE claims, OSHA agrees that in order to ensure safe and competent crane operations during the one-year extension, the employer duty must also be extended. Without an extension of the employer duty, the standard would have no requirement to ensure that crane operators know how to operate the crane safely during the operator certification extension. Therefore it is important that the Agency extend the employer duty while it engages in subsequent rulemaking.

C. Length of the extensions

Having determined that it is appropriate to delay the certification deadline and extend the employer duty to ensure operator competence, the remaining issue is the length of the extension. In the NPRM, OSHA proposed delaying the operator certification deadline and extending the existing employer duty for one year, until November 10, 2018. OSHA requested comment on the duration of the extension.

The majority of comments support OSHA’s proposed extension of the deadline for crane operator certification and the employer duty for one year. (ID-0545, 0561, 0563, 0566, 0572-575, 0578, 0580-582, 0585, 0588-600, 0602-605, 0607-614, 0617-618, 0621, 0624-627, 0632-640, 0642-643, 0645-647, 0651, 0653, 0656-660, 0662-6664, 0666-667). Some of these comments recommend that OSHA move as quickly as possible to address these rules. (ID-0605, 0618, 0632, 0651, 0656). NCCCO agrees with the Agency’s proposed extension and “urges OSHA to act with all speed to ultimately issue

its Final Rule *well within the extension* on this vitally important safety issue” (ID-0632). Jonathan Branton of Murray State University commented that “this issue does not need to be pushed back any further than one year” and it is “OSHA’s responsibility to not allow this to be further extended.” (ID-0605). The IUOE asked the Agency to “[p]lease do everything in your power to ensure that OSHA completes the process by November 2018.” (ID-0651).

Additionally, OSHA received comments recommending an extension of three years and an indefinite extension until OSHA addresses the certification issues raised by stakeholders after publication of the 2010 final cranes and derricks standard.

The National Propane Gas Association (NPGA) recommended delaying the deadline for the certification requirement and extending the employer duty “at least three years”, arguing that “if three years was not an adequate amount of time” to address certification issues raised by stakeholders, “it is not reasonable to presume one year is sufficient.” (ID-0648). The NPGA continues that “[w]e are concerned that the short delay is indicative of the agency’s intent to conduct an expedited process an accelerated rulemaking would be antithetical to the purpose and spirit of public engagement in the regulatory process.” (ID-0648). The National Association of Home Builders recommends that OSHA delay the deadline for the certification requirements and extend the employer duty another three years or indefinitely, arguing that “OSHA needs to ensure the certification procedures will actually improve safety” and not allowing enough time to address certification issues “only hurts the workers and the regulated community with continually changing deadlines and requirements.” (ID-0598). ABC also recommended that both the deadline for the certification requirement be

delayed and the employer duty be extended indefinitely as recommended by ACCSH in 2014, arguing that a one year delay “will not provide a sufficient amount of time for OSHA to complete a further rulemaking Limiting the amount of time the agency has to complete the rulemaking could lead to rushed and unclear regulations.” (ID-0650).

While OSHA appreciates the concern of some stakeholders that a one-year extension is an insufficient amount of time to address the issues raised by the industry after publication of the crane standard, OSHA is not persuaded an extension longer than one year is necessary. OSHA had not even decided whether to pursue rulemaking when it finalized the three-year extension in 2014. The Agency needed time to determine what regulatory approach would be appropriate for addressing the concerns raised by stakeholders after publication of the crane standard. (79 FR 7613). OSHA took time to make site visits and spoke to over 40 industry representatives about crane operator certification and operator competency. Using this information, OSHA drafted regulatory text that it presented to a special meeting of ACCSH on March 31, and April 1, 2015, where several stakeholders had the opportunity to provide feedback to the Agency.⁶ OSHA has taken the information from that meeting and worked to develop a proposed rule addressing stakeholders’ concerns. OSHA has nearly completed that proposed rule and intends to publish it for public comment shortly.

OSHA is in a different point of the process than it was three years ago and is confident that it will be able to complete the rulemaking within the year extension without curtailing the opportunity for stakeholders and the general public to participate fully in the rulemaking process.

⁶ Transcript for March 31: https://www.osha.gov/doc/acsh/transcripts/acsh_20150331.pdf; transcript for April 1: https://www.osha.gov/doc/acsh/transcripts/acsh_20150401.pdf.

The Agency rejects the calls for an indefinite extension for the same reasons that it rejected them in 2014. Failing to specify a compliance deadline for operator certification is likely to result in greater, not less, confusion. In addition, if OSHA does not designate a fixed period after which the certification requirements would automatically take effect, the Agency may face additional legal challenges to reinstating them. Moreover, OSHA has already dedicated a significant amount of time and resources to implementing the existing standard, including conducting an extensive negotiated rulemaking process before requiring that employers ensure their crane operators are certified. The Agency therefore finds it prudent and efficient to maintain the status quo for one more year while it considers additional rulemaking.

The Agency must balance the rationale for an additional extension against the concerns raised by the other commenters who point out that any unnecessary delay in the operator certification requirement could prevent the Agency from obtaining the full safety benefit of the cranes standard. For example, if OSHA delayed the operator certification requirement for another three years but completed its rulemaking within nine months, then delaying the certification deadline would be clearly excessive and needlessly delay safety benefits. OSHA believes that given the progress it has made developing a rule addressing stakeholders' concerns regarding operator certification, a one-year extension of both the deadline for the certification requirement and the employer duty is appropriate.

Therefore, OSHA has decided to delay the operator certification deadline for one year, until November 10, 2018, and to extend the employer duty to ensure that crane operators are competent to operate a crane safely for the same one-year period, as it

proposed. The Agency received no comment on the text of its proposed revision to §1926.1427(k), and the final rule adopts the provision as proposed.

D. Comments outside the scope of this rulemaking

OSHA received comments to this rulemaking that, in part or in whole, asked the agency to consider alternatives and revisions to the certification requirements from the 2010 final rule. (ID-0544, 0546, 0548, 0549, 0555, 0564, 0567, 0598, 0606, 0639, 0646, 0648, 0651, 0655, 0658, 0660, 0663, 0667). These comments, although related to operator certification and the employer duty, are outside the scope of this rulemaking and the narrowly tailored issue OSHA proposed: whether the deadline for the operator certification requirements should be delayed and whether the employer duty to ensure safe and competent crane operation should be extended by one year.

III. Agency Determinations

A. Final Economic Analysis and Regulatory Flexibility Analysis

When it issued the final cranes 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 for this crane rule extension (2017 PEA) was based on these documents along with further analysis and is

the basis for this final economic analysis (FEA). There were no comments submitted to the record in response to the 2017 PEA that included data that could alter OSHA's analysis; therefore, this FEA is substantially the same as the 2017 PEA.

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 FEA focuses solely on costs, and not on any changes in safety and benefits resulting from delaying the certification deadline and extending the employer duties under §1926.1427(k)(2). As OSHA noted in its proposal, the Agency previously provided its assessment of the benefits of the cranes standard in the 2010 FEA. OSHA did not receive any comment on this approach or any request for additional analysis of benefits. As noted elsewhere in this preamble, the primary rationale for this final rule 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, §1926.20(b)(4) ('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 in November 2017 and employers would not have 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 3 percent (\$5.2 million per year using an interest rate of 7 percent).⁷

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

⁷As explained in the following discussion, OSHA typically calculates the present value of future costs and benefits using two interest rate assumptions, 3 percent and 7 percent, as recommended by OMB Circular A-4 of September 17, 2003. All dollar amounts unless otherwise stated are in 2016 dollars.

- (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 delaying the certification deadline to 2018.⁸

The methodology used here is substantially the same as used in the 2014 extension FEA, and OSHA did not receive any comment on this methodology when it included it in the 2017 PEA. Below, Table 1 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.

⁸ Though this is a single year extension, the analysis needs to extend over several future years. For convenience, OSHA refers to the annual time period as a “Certification Year” (CY) in this economic analysis, which OSHA defines as ending November 10 of the calendar year; e.g., CY 2017 runs from November 10, 2016, to November 9, 2017.

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 informal conversations with industry sources who participated in 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 cranes standard; those who have a certificate that is not in compliance with the existing cranes standard; and those who have no certificate.⁹ 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 cranes standard would have to complete a test that is

⁹ OSHA is not making any determination about whether a specific certification complies with the requirements of the cranes standard. For the purposes of this analysis only, OSHA will treat certificates that do not include a multi-capacity component as not complying with the cranes standard, and certificates that include both a type and multi-capacity component as complying with the cranes standard.

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 percent, 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 ($1.43 \times \26.58), including a markup for benefits.¹⁰ 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 cost is \$41.19 ($1.43 \times \28.75).

Below these total hourly costs will be referred to as the respective occupation's "wage."

¹⁰ Calculations in the text may not exactly match due to rounding for presentation purposes. All final costs are exact, with no rounding.

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 x (\$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 x (\$38.08 + \$41.19)). OSHA did not receive any comments on these unit cost estimates.

Besides these assessment costs, OSHA notes that §1926.1427(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 §1926.1427(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 an assessment for a crane that differs in type or capacity 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 new 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 2017 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 cranes 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 §1926.1427(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 assessment; and operators who indicate that 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 cranes standard. The 2014 FEA

estimated 117,130 operators and this FEA also uses this estimate. The Agency solicited comment and additional data on this estimate but received none.

For the purpose of determining the number of assessments required each year under this proposal, OSHA is relying on the 23 percent turnover rate for operators originally identified in the 2008 PEA for the crane rule and used most recently in the 2014 extension FEA (79 FR 57793) and the 2017 PEA for this rule. OSHA requested comment on this rate, but received none.

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 that 26,940 assessments occur each year based on turnover (i.e., 117,130 operators x 0.23 turnover rate). In addition, just as it did with the previous extension, OSHA assumed that 15 percent of operators involved in assessments related to turnover would fail the first test administration and need reassessment (79 FR 57793). Therefore, OSHA added 4,041 reassessments (26,940 assessments x 0.15) to the number of reassessments resulting from turnover, for an annual total of 30,981 assessments resulting from turnover and test failure (26,940 + 4,041).

Annual assessment costs. OSHA must determine the annual base amount for the two scenarios: 1) retaining the original 2017 deadline (status quo); and 2) delaying the deadline to 2018 (extension NPRM).

The first part of the calculation is the same under both scenarios. Because the annual assessment costs vary by the different levels of assessment required (depending on the operator's existing level of certification), OSHA grouped the 117,130 operators

subject to the crane standard into three classifications: operators with a certificate that complies with the standard; operators with a certificate only for crane type; and operators with no certification. In order to simplify the estimation for this one-year extension (the 2014 extension was for 3 years) and reflect the last hard data point the Agency has, the Agency is using a static crane operator pool and the composition of the base operator population used in the 2014 deadline extension: 15,000 crane operators currently have a certificate that complies with the existing cranes standard, 71,700 have a certificate for crane type only (but not capacity), leaving 30,430 crane operators with no crane certification (117,130 total operators - (15,000 operators with compliant certification + 71,700 operators with certification for type only)).

Assuming the turnover rate of 23 percent and the failure rate of 15 percent for turnover-related assessments are distributed proportionally across the three types of operators, then the number of assessments for operators with compliant certification is 3,968 $((0.23 + (0.23 \times 0.15)) \times 15,000)$, the number of assessments for operators with type-only certification is 18,965 $((0.23 + (0.23 \times 0.15)) \times 71,700)$, and the number of assessments for operators with no certification is 8,049 $((0.23 + (0.23 \times 0.15)) \times 30,430)$.

Under scenario 2, there is an extension and employers would not certify all of their operators during CY 2017. 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 certification requirement becomes effective, 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 FEA, 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 CY 2018 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 result from OSHA's delay of 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. As such, 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 cranes standard (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 ($\$1,500 + (18 \text{ hours} \times \$38.08)$) (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 crane 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 x \$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 x \$38.08) + \$250)).¹¹

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 FEA.

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 percent new-hire estimate from the FEA discussed above to calculate the number of new operators; therefore, of the 117,130

¹¹There are no certification costs for operators who already have a certificate that complies with the cranes standard.

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 cranes standard, and the remaining 24,574 operators ($117,130 - (71,700 + 15,000 + 5,857)$) are experienced operators without certification.

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 111,274 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 percent of all operators with a 5-year certificate (22,255 operators ($.20 \times 111,274$)) 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

certificates are portable across employers, as specified by the cranes standard (see §1926.1427(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 percent of the 117,130 operators ($26,940 = 0.23 \times 117,130$) will enter the workforce, change employers, 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 percent, or 5,857 ($0.05 \times 117,130$), will result from new operators entering the occupation each year; 9 percent, or 10,542 ($0.09 \times 117,130$), 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 percent, 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 and the 2017 PEA.

Annual 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 cranes standard using the above unit-cost estimates and numbers of operators is \$47,436,368 ((71,700 operators with type-only certification x \$345.20) + (24,574 experienced operators without certification x \$402.32) + (5,857 operators with no experience or certification x \$2,185.44)). The Agency, following the

previous FEAs (75 FR 48096 and 79 FR 57795), annualized this cost for the five-year period during which operator certification remains effective, resulting in an annualized cost of \$8,447,719. 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).

c. Year-by-year cost differential for delaying the certification deadline to 2018 and preserving the employer assessment duty over that same period

The ultimate goal of this analysis is to determine the annualized cost differential between scenario 1 (the status quo) and scenario 2 (the extensions of the certification date and the employer assessment duty), so the final part of this PEA compares the yearly assessment and certification costs employers will incur under the two scenarios. Because the assessment and certification costs change across years under each scenario, OSHA must compare the cost differential in each year separately to determine the annual cost savings for each year attributable to scenario 2. OSHA calculated the present value of each year's differential, which provides a consistent basis for comparing the cost differentials over the extended compliance period. OSHA then annualized the present value of each differential to identify an annual amount that accounts for the discounted costs over this period. Table 1 below summarizes these calculations.

Table 1 shows that assessment and certification costs are just shifted out another year. As noted earlier, OSHA estimated the overall cost differential between these two

scenarios by calculating the difference in total (assessment and certification) costs each year across the two scenarios. The net employer cost savings in current dollars attributable to adopting the second scenario are, for each certification year: 2017, \$18.2 million; 2018, \$8.7 million; 2019-2021, \$0; 2022, -\$7.5 million.¹²

¹²A positive cost differential indicates cost savings and a negative cost differential indicates net costs. Savings in the first two years is 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.

Year-by-year cost differential if OSHA delays the certification deadline to 2018

Table 1

Certification Year	2017	2018	2019	2020	2021	2022	2023
Operator Pool							
Scenario 1 (No Deadline Extension)							
Operators with Non-Compliant Certification	71,700	0	0	0	0	0	0
Operators with Compliant Certification	15,000	111,274	111,274	111,274	111,274	111,274	111,274
Operators with No Certification	24,574	0	0	0	0	0	0
New Operators	5,857	5,857	5,857	5,857	5,857	5,857	5,857
Scenario 2 (Deadline Extension)							
Operators with Non-Compliant Certification	71,700	71,700	0	0	0	0	0
Operators with Compliant Certification	15,000	15,000	111,274	111,274	111,274	111,274	111,274
Operators with No Certification	24,574	24,574	0	0	0	0	0
New Operators	5,857	5,857	5,857	5,857	5,857	5,857	5,857
Costs							
Scenario 1 (No Deadline Extension)							
Total Assessment Costs	4,540,348	0	0	0	0	0	0
Total Certification Costs	20,362,269	33,645,533	33,645,533	33,645,533	33,645,533	26,082,317	26,082,317

Total Costs	24,902,617	33,645,533	33,645,533	33,645,533	33,645,533	26,082,317	26,082,317
Scenario 2 (Deadline Extension)							
Total Assessment Costs	6,624,861	4,540,348	0	0	0	0	0
Total Certification Costs	0	20,362,269	33,645,533	33,645,533	33,645,533	33,645,533	26,082,317
Total Costs	6,624,861	24,902,617	33,645,533	33,645,533	33,645,533	33,645,533	26,082,317
Cost Differential (Scenario 2 - Scenario 1)	(18,277,756)	(8,742,916)	-	-	-	7,563,216	-

Source: OSHA, ORA Calculations.

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).

As a sensitivity analysis the Agency looked at including possible overhead costs. 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,¹³ and government contractors have been reported to use an average of 77 percent.^{14,15} Some overhead costs, such as advertising and marketing, vary with output rather than with labor costs. 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

¹³ U.S. Environmental Protection Agency, “Wage Rates for Economic Analyses of the Toxics Release Inventory Program,” June 10, 2002.

¹⁴ Grant Thornton LLP, *2015 Government Contractor Survey*. (<https://www.grantthornton.com/~media/content-page-files/public-sector/pdfs/surveys/2015/Gov-Contractor-Survey.ashx>)

¹⁵ For a further example of overhead cost estimates, please see the Employee Benefits Security Administration’s guidance at <https://www.dol.gov/sites/default/files/ebsa/laws-and-regulations/rules-and-regulations/technical-appendices/labor-cost-inputs-used-in-ebsa-opr-ria-and-pra-burden-calculations-august-2016.pdf>

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 FEA 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 percent of revenues, and well below 5 percent 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 entities. After providing relatively similar estimates in the 2014 FEA, OSHA made the same certification in the 2014 FEA and proposed the same certification in the 2017 PEA but did not receive any adverse comment on either the certification or its underlying rationale.

B. Paperwork Reduction Act

The Paperwork Reduction Act (PRA) requires Federal agencies to obtain the Office of Management and Budget (OMB) approval of information collection requirements before an Agency can conduct or sponsor the information collection requirement; and to display the OMB control (approval number) (44 U.S.C. 3507(d)). Agencies submit an Information Collection Request (ICR), with paperwork analysis, to OMB seeking approval of their paperwork requirements. The information collection requirements in the Cranes and Derricks in Construction Standard (29 CFR part 1926, subpart CC) have been approved by OMB in the ICR titled *Cranes and Derricks in Construction Standard (29 CFR part 1926, Subpart CC)*, under OMB control Number 1218-0261. These paperwork requirements expire on February 28, 2020.

In the August 30, 2017 NPRM, OSHA notified the public that the Agency believed the proposed Cranes and Derricks in Construction: Operator Certification Extension rule did not contain additional collection of information, and that OSHA did

not believe it was necessary to submit a new (revised) ICR to OMB. OSHA instructed the public to submit comments on this determination to OMB and encouraged them to submit their comments to OSHA. No comments were received and OSHA has determined this final rule requires no additional collection of information or any permanent change to the collection program. As a result, the Agency did not submit an ICR to OMB.

The Agency notes that a Federal agency generally cannot conduct or sponsor a collection of information, and the public is generally not required to respond to an information collection, unless it is approved by OMB under the PRA and displays a currently valid OMB Control Number. In addition, notwithstanding any other law, no person may generally be subject to penalty for failing to comply with a collection of information that does not display a valid Control Number.¹⁶

C. Federalism

OSHA reviewed this final 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 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

¹⁶ See 5 CFR 1320.5(a) and 1320.6.

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, this final rule limits 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 standards provided these requirements are at least as effective in providing safe and healthful employment and places of employment as the requirements specified in this final rule.

D. State Plans

When Federal OSHA promulgates a new standard or more stringent amendment to an existing standard, State Plans must either amend their standards to be “at least as effective as” the new standard or amendment, or show that an existing State standard covering this area is already “at least as effective” as the new Federal standard or amendment (29 CFR 1953.5(a)). State Plans adoption must be completed 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 amendment to OSHA's crane standard in this final rule only delays the deadline for operator certification requirements and does not impose any new requirements on employers. Accordingly, State Plans are not required to amend their standards to delay the deadline for their operator certification requirements, but they may do so if they so choose. If they choose to delay the deadline for 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 §1926.1427(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 III.A (Final Economic Analysis and Regulatory Flexibility Analysis) of this preamble, this final rule does not impose any costs on private-sector employers beyond those costs already taken into account in the 2010 final rule for cranes and derricks in construction. Because OSHA reviewed the total costs of

the 2010 final rule under the UMRA, no further review of those costs is necessary. Therefore, for the purposes of the UMRA, OSHA certifies that this final 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 final rule in accordance with Executive Order 13175 (65 FR 67249) and determined that it does not have “tribal implications” as defined in that order. 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. 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 final rule to range from \$4.4 million to \$5.2 million, depending on the discount rate. This final rule is considered an EO 13771 deregulatory action. Details on the estimated cost savings of this final rule can be found in the rule’s economic analysis.

H. 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 cranes rulemaking, OSHA made such a determination with respect to the use of cranes and derricks in construction (75 FR 47913, 47920-21). This final rule does not impose any new requirements on employers. Therefore, this final rule 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). Therefore, this final rule is technologically feasible as well because it does not require employers to implement any additional protective measures; it simply extends the duration of existing requirements.

List of Subjects in 29 CFR Part 1926

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

Signed at Washington, DC, on November 3, 2017.

Loren Sweatt,

Deputy Assistant Secretary of Labor for Occupational Safety and Health.

Amendments to Standards

For the reasons stated in the preamble of this final rule, OSHA amends 29 CFR part 1926 as follows:

PART 1926—[AMENDED]

Subpart CC—Cranes and Derricks in Construction

1. The authority citation for subpart CC of 29 CFR part 1926 continues to read as follows:

AUTHORITY: 40 U.S.C. 3701 *et seq.*; 29 U.S.C. 653, 655, 657; and Secretary of Labor's Orders 5-2007 (72 FR 31159) or 1-2012 (77 FR 3912), as applicable; and 29 CFR Part 1911.

2. Revise §1926.1427(k) to read as follows:

§1926.1427 Operator qualification and certification.

* * * * *

(k) *Phase-in.* (1) The provisions of this section became applicable on November 8, 2010, except for paragraphs (a)(2) and (f) of this section, which are applicable November 10, 2018.

(2) When paragraph (a)(1) of this section is not applicable, all of the requirements in paragraphs (k)(2)(i) and (ii) of this section apply until November 10, 2018.

(i) The employer must ensure that operators of equipment covered by this standard are competent to operate the equipment safely.

(ii) When an employee assigned to operate machinery does not have the required knowledge or ability to operate the equipment safely, the employer must train that employee prior to operating the equipment. The employer must ensure that each operator is evaluated to confirm that he/she understands the information provided in the training.

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