Negotiated rule on crane safety nears finish line

By Marvin V. Greene, associate editor

Photo: OSHA

Whether the project is an office tower, hotel, stadium or highway bridge, giant cranes that dot America's construction landscape are surefire signs of vibrant economic and community activity. But OSHA and construction industry stakeholders fully understand that cranes – and the machinery that puts them into operation – are complicated and can pose significant dangers to workers and the public, and they have been zealously addressing the hazard.

Statistics paint a stark picture, according to OSHA. More than 200 fatalities involving cranes in construction occurred between 1998 and 2002. In the five previous years, about 175 fatalities occurred. Fully 45 percent of the fatalities were classified as struck by/crushed, and about 35 percent were classified as electrocutions. Nearly 70 percent of the victims were classified as workers who were non-crane operators.

High-profile cranes accidents over recent years have received extensive media coverage and have put the public spotlight on crane safety.

High-profile cranes accidents over recent years have received extensive media coverage and have put the public spotlight on crane safety. In Boston in April, a construction crane and scaffolding collapsed at a downtown college, killing three people, injuring several and crushing numerous cars. People on the street "never knew what hit them," Boston Mayor Thomas M. Menino said. In 2001, a 1,000-ton crane attaching a bridge over Interstate 280 in Toledo, OH, toppled. Three workers died. And at the site of Miller Park, the home of Major League Baseball's Milwaukee Brewers, a 1999 collapse resulted in three fatalities. New York City; Stratford, CT; Staten Island, NY; Jersey City, NJ; and San Francisco are other cities where prominent crane accidents have occurred.

Reprinted from *Safety+Health,* Vol. 174, No. 3 • ©2006 National Safety Council

Key provisions of the draft rule

- Certification of crane operators by crane operator testing organizations must be approved by a nationally recognized accrediting agency or by an employer's own qualification program, which must be audited.
- The scope of the rule must cover the wide variety of new types of cranes developed in the market over the past 30 years.
- A qualified person on construction worksites must be designated to address hazards associated with equipment assembly and disassembly.
- Rules must ensure ground conditions are adequate for crane set-up to help prevent tip-overs.
- Rules must be followed to ensure that equipment does not come within a prescribed distance of power lines and specifying measures are to be taken when working closer to the prescribed distance.
- Signal persons must meet qualification requirements.
- Requirements for use of cranes on barges are to be updated.

Source: OSHA

Negotiated rulemaking

OSHA is tackling crane safety through a seldom-used standards-setting process called negotiated rulemaking – an administrative effort that provides a forum for discussions and deliberations among interested stakeholders seeking consensus on safety rules and making recommendations to the agency. OSHA established the 23-member Cranes and Derricks Negotiated Rulemaking Advisory Committee in 2002. That panel's final draft proposal – submitted in July 2004 – is winding its way through the final stages of government's bureaucratic cycle.

Publishing a final rule is a top priority for OSHA, said Noah Connell, acting director of OSHA's Directorate of Construction, who served as the agency's point person to the committee. "Assistant Secretary [Edwin G.] Foulke has made it very clear that he wants to move forward with this project," Connell said.

Negotiated rulemakings are designed to be focused and intense. (See "Washington Update," page 24, for more information on negotiated rulemaking.) The panel held 11 formal, multiple-day meetings around the country between July 2003 and July 2004, rendering recommendations on issues including operator qualifications, operating cranes near power lines, new testing verification criteria, use of land cranes on barges, inspections, and responsibility for ground conditions.

The committee task was to examine proposed revisions of existing construction safety standards for the cranes and derricks portion of 29 CFR 1926 Subpart N – Cranes, Derricks, Hoists, Elevators and Conveyors. Since it was promulgated in 1971, Subpart N requirements have been amended only once despite dramatic changes in the industry. The bulk of the original rule is based on industry consensus standards that were developed in the late 1960s.

Final rule likely in 2007

Although Connell said he could not offer a timetable for publication of a final rule, a number of steps remain

Photo: OSHA

Feature at a Glance

Seeking to combat increasing fatalities and high-profile accidents, OSHA is tackling construction crane safety through a seldom-used standards-setting process called negotiated rulemaking in order to update and revise 29 CFR 1926 Subpart N – Cranes, Derricks, Hoists, Elevators and Conveyors. The Cranes and Derricks Negotiated Rulemaking Advisory Committee's draft standard, submitted in July 2004, is winding its way through the remaining stages of the government's bureaucratic cycle to final rule stage.

Key points

- More than 200 fatalities occurred involving cranes in construction between 1998 and 2002.
- Publishing a final rule is a top priority for OSHA, according to Noah Connell, acting director of OSHA's Directorate of Construction.
- Since it was promulgated in 1971, Subpart N requirements have been amended only once despite dramatic industry changes.
- A number of steps remain that likely will push issuance of the revised standard into 2007.

Cranes and derricks negotiated rulemaking timeline

1971 – OSHA worker safety standard for the use of cranes and derricks in construction, 29 CFR 1926.550 Subpart N, is promulgated.

1998 – OSHA's Advisory Committee on Construction Safety and Health forms a work group to review Subpart N and subsequently passes a motion, submitted by the work group, recommending OSHA consider a negotiated rulemaking process to develop proposed revisions to Subpart N.

July 2002 – OSHA issues a *Federal Register* Notice of Intent to establish a negotiated rulemaking committee in which it determines the use of the negotiated rulemaking procedure for crane safety to be in the public's interest. A request for committee nominees and public comments also is issued.

February 2003 – From 55 nominations received for committee membership, OSHA proposes a 20-member Cranes and Derricks Negotiated Rulemaking Advisory Committee, later expanding the committee size to 23.

July 2003 – OSHA announces final committee membership and retains Susan Podziba & Associates to provide facilitation services for the negotiated rulemaking. First of 11 formal committee meetings is held in Washington.

July 2004 – The final committee meeting is held in Washington in which the panel reaches final consensus. Draft proposal of rule is submitted to OSHA.

June 2006 – OSHA initiates a 120-day process for review of committee draft proposal under the Small Business Regulatory Enforcement Fairness Act.

Source: OSHA

that likely will push issuance of the revised standard into 2007.

In June, OSHA initiated a review of the draft proposal under the Small Business Regulatory Enforcement Fairness Act, a federal law that requires new rulemakings to be examined for their economic impact on small business. A group comprising officials from OSHA, the Office of Management and Budget, and the Small Business Administration was charged with receiving public comment and producing a report on what was learned from the review process.

OSHA's most recent semiannual regulatory agenda listed September as the completion date for the small business impact report. "We are attempting to meet our schedule," Connell said at press time. OSHA must then examine the small business impact report to determine if changes to the draft proposal are warranted and must write a preamble to the final rule for publication in the Final Register, explaining the proposed standard with regulatory information. Before the final rule is published, officials within the Department of Labor and the Office of Management of Budget must review the proposal to ensure it adheres to policy.

Despite the key steps that remain, Connell said OSHA is happy with the outcome of the committee's work. "The agency is committed to going forward with the negotiated rulemaking document to the extent allowable by law. This is an important component of our strategy to try to get those [fatality] numbers down. We can certainly raise issues and ideas that are floated in the [small business impact] process in the preamble of the proposed rule," Connell said.

Stakeholder groups represented

The Cranes and Derricks committee members brought wide-ranging expertise to the panel. The 23 members – all uncompensated by the government – were drawn from interests including crane manufacturers, operators, contractors, labor unions, government entities, trainers, power line owners and insurers.

Photo: OSHA

Photo: OSHA

All issues in the consensus draft were reached by unanimous agreement except one dealing with operator qualifications, on which two panel members dissented.

The committee – chartered under the Federal Advisory Committee Act and the Negotiated Rulemaking Act – logged 30.5 meeting days, or 244 hours, in completing its deliberations. All issues in the consensus draft were reached by unanimous agreement except one dealing with operator qualifications, on which two advisory panel members dissented.

Under the Negotiated Rulemaking Act, criteria for establishing such a panel included the provision that the committee would reach consensus within a fixed period of time. Susan L. Podziba, principal of Susan Podziba & Associates, a Brookline, MA-based public policy mediation firm that facilitated the panel's work, said the committee provides a model example for how negotiated rulemaking is designed to work. "Cranes and Derricks was a perfect application of [negotiated rulemaking]. You have a very technical standard where the government just can't know all of the details of every crane and derrick that it is regulating," Podziba said.

Committee member George R. "Chip" Pocock, safety and risk manager at Buckner Steel Erection in Graham, NC, and incoming president of the Greensboro, NC-based Steel Erectors Association of America, said the panel made strides in updating procedures in a number of areas. Pocock, who trains crane operators, pointed to provisions for operator certification, signaling and working near power lines as key elements of the committee's draft rule.

New technologies are addressed as well, Pocock said. Engineers who once used slide rules and mental math to calculate crane load capacities now determine those specifications via computer modeling, he said. Panel member William J. "Doc" Weaver of Salt Lake City, who began working in the industry in the 1960s as a lineman and is now retired, said crane industry changes have been profound over the years. He recalled that hydraulic cranes did not exist when he first entered the business. Weaver represented the Bethesda, MD-based National Electrical Contractors Association Inc. on the panel.

Michael Brunet, manager of product safety for Manitowoc Cranes in Manitowoc, WI, and a member of the Charlotte, NC-based Crane Manufacturers Association of America, said industry is awaiting the positive changes the rulemaking is expected to bring when published. "I think [the process] was successful," he said. "It brought a lot of key people in. We all had our differences. But we compromised to get through the process in the time allotted. I think it gave a forum for everybody that wanted input to let their opinions and comments be heard," Brunet said. S+H

More on cranes and derricks at *www.nsc.org/plus*

Current regulation: Read the current standard, 29 CFR 1926.550 Subpart N.

Facilitator's report: Examine the extensive facilitator's report submitted to OSHA in 2004, which outlines the process for the Cranes and Derricks Negotiated Rulemaking Advisory Committee's work.

What's a derrick? OSHA's construction safety and health topics page offers safety information on cranes, derricks and hoist safety, with links to numerous other resources.

Interested in negotiated rulemaking? The Negotiated Rulemaking Act was enacted in 1990 and permanently authorized in 1996. Read the law as written.

Safety+Health Plus www.nsc.org/plus