

U.S. Department of Labor
Occupational Safety and Health Administration

Cranes and Derricks Negotiated Rulemaking Advisory Committee

Draft Meeting Summary – June 1-4, 2004

Agenda Review

C-DAC members reviewed and accepted the June meeting agenda.

Review and Approve May 4-7 Meeting Summary

C-DAC members reviewed the May 4-7 draft meeting summary and made one editorial change. It was approved as final and will be available through the OSHA docket.

Review of Draft Regulatory Text

The Committee reviewed and revised draft regulatory text in an effort to reach tentative agreements on each section of the standard. During the June meeting, C-DAC reached tentative agreements on §1406 Operation – Procedures, §1412 Signal Person Qualifications, §1413 Requirements for equipment with a manufacturer-rated hoisting/lifting capacity of 2,000 pounds or less, §1418 Wire Rope – Inspection, §1419 Wire Rope – Selection and Installation criteria, §14XX Operational Aids, §1424 Fall Protection, §1430 Power line safety, §1432 Design, Construction and Testing, §1435 Free Fall/Controlled Load Lowering, §1436 Multiple Crane Lifts, §1437 Tower Cranes (except operational aids) and §1439 Overhead & Gantry Cranes.

The following reflects C-DAC discussions relative to some of the sections listed above.

§1406 Operation – Procedures: Among many other items, Committee members discussed and agreed upon a lockout/tag out procedure for when a crane or derrick is taken out of service.

§1412 Signal Person Qualifications: The Committee agreed that documentation required under this section must come from a qualified evaluator. The Committee agreed that the use of a qualified evaluator is necessary because that

person needs to be both knowledgeable and able to evaluate. In addition, although a signal person will not be required to carry a card documenting his qualifications, the Committee decided to include language in the Preamble regarding the value employees carrying such cards. Finally, C-DAC members decided that documentation of signal person qualifications issued by a third party will be transferable while the same issued by his employer will not.

§1413 Requirements for equipment with a manufacturer-rated hoisting/lifting capacity of 2000 pounds or less: C-DAC members discussed whether to exclude safety devices and operational aids from being required on this equipment. Significantly, the Committee decided, among other points, to limit inspections to manufacturer's specifications and to qualify signal persons by training only as opposed to training and testing.

§14XX Operational Aids: C-DAC members agreed to extend the seven day repair/replacement exception to category II operational aids.

§1418 Wire Rope – Inspection: C-DAC members decided to require replacement of wire rope that has come into electrical contact with a power line.

§1424 Fall Protection: After much discussion, the Committee agreed (with some exceptions) that fall protection will be required for employees on a walking/working surface with an unprotected side or edge of 6 feet or more above a lower level. However, the Committee agreed to only require fall protection for workers engaged in assembly/disassembly at heights greater than 15 feet. Finally, C-DAC members decided to allow workers to tie off to the crane or derrick hook (as well as other points on the load line) provided a qualified person has evaluated and approved the set up and rated capacity as set forth in this section. One Committee member questioned the prohibition of removable guardrails/railings on boom walkways; C-DAC members responded that the risks associated with their use (i.e., unsecured guardrails falling off the boom) outweighed the benefits of their use.

§1430 Power line safety: Among other items, C-DAC members discussed the eleven procedures required for work inside the Table A Zone. Although one member expressed concern that the use of this list of safety procedures would create a false sense of security, the Committee ultimately agreed that the work in

this zone is already taking place and that procedures were needed to address the dangers. The Committee also discussed who shall supervise the implementation of those procedures. Several members expressed concern relative to potential liability associated with such supervision.

§1432 Design, Construction and Testing: C-DAC members resolved the issues related to testing under CEN's EN 13000 by: (1) requiring physical testing in accordance with SAE J1063 or SAE 987 unless the computer modeling analysis has been demonstrated by a documented history of verification, and (2) requiring the computer modeling to show that all strength margins for the load cases listed in J1063 and J987 have been met. In addition, the Committee agreed that compliance with the design and construction requirements set forth in this section can be demonstrated by referral to the manufacturer's documentation.

§1435 Free Fall/Controlled Load Lowering: In addition to other items, the Committee agreed that operators will be trained on the emergency procedures related to Free Fall/Controlled Load Lowering. The training requirement will be referenced in this section and included in §1417 Training.

At its final meeting in July, C-DAC will work to address all outstanding issues and then review its tentative agreements for clarity and consistency with all other sections of the draft standard. C-DAC members were asked to identify any tentative agreements that may need to be re-negotiated prior to the July meeting.

Outstanding Issues

The following list reflects outstanding issues that still need to be addressed by C-DAC members as well as related ongoing efforts to develop consensus regulatory text.

§1400(d)(2) Scope, Limited requirements (dedicated pile drivers): A C-DAC Work Group will discuss which requirements of the standard will apply to dedicated pile drivers.

§1417 Training: OSHA will draft this section to reflect previous discussions. It will include training requirements referenced elsewhere in the standard, such as emergency procedures for free fall/controlled load lowering, power line safety,

avoiding holds and crush/pinch points, and principles necessary for safe operation of cranes/derricks.

§1422 Operator Qualifications: The Committee did not discuss operator qualifications during the June meeting. A C-DAC Work Group will meet June 30 to attempt to develop a proposal for review by the full Committee. (Note: After the Phoenix C-DAC meeting, the Work Group meeting was cancelled.)

§1425(o) Hoisting personnel in drill shafts (Use of Boatswain's Chair) and (p) Hoisting personnel for pile driving equipment: These sections were discussed by a Work Group, drafted to reflect those discussions, and will be reviewed by the Committee.

§14XX Power Line Safety - equipment in transit under Power Lines (on the construction site): This section will be revised to reflect C-DAC discussions. The proposed language parallels the current ANSI standard, but addresses transit under power lines on the construction site rather than transit on roadways. This section will be reviewed again at the final meeting.

§14XX Power Line Safety - exclusion for work covered by Subpart V: C-DAC members will compare the proposed requirements of Subpart N to Subpart V to determine if an exclusion for work covered by Subpart V is reasonable and necessary.

§1431 Derricks: The Derricks Work Group will review draft regulatory text, which will be presented to the C-DAC Committee.

§1433 Floating Cranes & Cranes on Barges: The Floating Cranes & Cranes on Barges Work Group will review draft regulatory text, which will be presented to the C-DAC Committee.

§1437.XXX Tower Cranes - Operational Aids (alternative measures): This section will be drafted for review at the final meeting.

§14XX Supplemental Requirements for Sideboom Cranes: The Committee is obtaining the most current B30.14 and J743A for further review.

§1440 Definitions: CDAC members will review and provide comments on this section to OSHA by Friday, June 18th. It will then be reviewed with the tentative agreements already reached.

Comprehensive Tentative Agreement List

C-DAC members have reached tentative agreements on the sections listed below.

- §1400 Scope¹
- §1402 Assembly/Disassembly- Selection of Manufacturer or Employer Procedures
- §1403 Assembly/Disassembly- General Requirements
- §1404 Assembly/Disassembly- Additional Requirements for Dismantling Booms and Jibs
- §1405 Assembly/Disassembly- Employer Procedures
- §1406 Operation- Procedures
- §1407 Authority to Stop Operation
- §1408 Signals - General Requirements
- §1409 Signals- Radio, telephone or other electronic transmission of signals
- §1410 Signals- Voice, Additional Requirements
- §1411 Hand Signal Chart, Standardized Voice Signals
- §1412 Signal Person Qualifications
- §1413 Requirements for equipment with manufacturer-rated capacity of 2,000 pounds or less²
- §1414 Safety Devices
- §14XX Operational Aids
- §1415 Inspections
- §1416 Equipment Modifications
- §1419 Wire Rope - Inspection
- §1420 Wire Rope - Selection and Installation Criteria
- §1423 Keeping Clear of the Load
- §1424 Fall Protection
- §1425 Hoisting Personnel (except (o) Hoisting personnel in drill shafts (Use of Boatswain's Chairs) and (p) Hoisting personnel for pile driving equipment)
- §1426 Qualifications of Maintenance & Repair Workers
- §1428 Ground Conditions

¹ C-DAC members tentatively agreed to specifically exclude wheel (rubber-tired) loaders, loaders with a backhoe, and track loaders.

² One C-DAC member dissented from this tentative agreement.

- §1429 Work Area Control
- §14XX Power Line Safety (up to 350 kV) - assembly and disassembly
- §14XX Power Line Safety (up to 350 kV) - crane operations
- §14XX Power Line Safety (over 350 kV)
- §14XX Power Line Safety (all voltages) - crane operations inside Table A Zone
- §1432 Design, Construction, and Testing
- §1435 Free Fall/Controlled Load Lowering
- §1436 Multiple Crane Lifts
- §1437 Tower Cranes (except operational aids)
- §1439 Overhead & Gantry Cranes

Public Comment

Jennifer Moore, mother of Rory Moore, who died after touching electrified rigging while working on a construction site, asked the Committee to require insulating links on all cranes because she believes that some companies will not implement the safety measures required under the standard.

Bruce Moore, father of Rory Moore, asked the Committee to require insulating links on all cranes because crane rentals will often not be able to conduct pre-planning to identify power line hazards. He emphasized the need to make insulating link use a matter of habit.

Ben Salinas, Summit Contracting, spoke against mandatory third party certification of crane operators and stated that a required written test would discriminate against Hispanic operators who do not read or write English.

Jim Ahern, Ahern & Associates, Inc., stated that accidents more often result from poor project management decisions. Thus, he suggested allowing supervisors to be certified on the written test and operators to be certified on a practical test. He indicated that certifying in this manner would also lessen the risk of economic loss associated with a certified employee leaving the company. In addition, Mr. Ahern stated that he would like to be able to certify his operators in-house based upon "reasonable criteria." Finally, he recommended including all text in the standard rather than incorporating regulations by reference.

Dan Kuhs, Pile Drivers Local Union #56 (New England), stated that third-party standardized training is critical and that operators need to be trained and tested

on the specific equipment they will use. He also favors the inclusion of drug testing and physical requirements.

Jay Hirtzer, H.J. Hirtzer & Associates, Inc., described the price range, based upon size, of the insulating links offered by his company and stated that they are recertified annually.

Homer Peterson, Peterson Beckner Industries, spoke in favor of mandatory certification and of allowing employers to train their employees. He also stressed the need for the certification to be portable. He also asked that OSHA resubmit the final version of the rule to the Committee for its re-approval by consensus.

Michael Eggenberger, Bay Ltd., stated that NCCCO certification often does not test operators on the specific equipment they will operate. He asked that employers be given a choice as to whether to certify in-house or use a third party. He recommended letting clients decide whether or not they want to hire crane operators with third-party certification.

Alfonso Fernandez, J.D. Abrams, stated that the written exam requirement would put Hispanic operators who do not read or write English at a disadvantage, and asked that multiple certification options be provided. After describing his organization's lift plan meetings, he recommended the use of a certified person to supervise non-certified operators during critical lifts.

Jim Andoga, Austin Bridge and Road, stated that third party operator certification would disadvantage Hispanic operators, and asked the Committee to allow employers to certify their employees, given that employers are ultimately liable for their operators. He suggested that certain employers could get approved to certify their operators.

Art Daniel, Boring & Tunneling Company of America, spoke in favor of training, physical qualifications, and drug testing, and against mandatory third party certification. Because NCCCO is currently the only existing organization that can independently certify crane operators, he asked Committee members affiliated with NCCCO to abstain from voting on operator certification issues. He also suggested that Hispanic employees who do not read or write English be

given the option of an oral exam. He also asked that the wheel-loaded portion of rubber-tired backhoes be specifically excluded from the standard.

Mary Lou Reece, Reece Construction Company, Inc., suggested requiring different certification levels for different crane sizes and certification of only the supervisor in control. She expressed concern that some contractors might try to get around the independent operator certification requirement by making lifts with non-crane equipment not intended for such uses.

Hugh Pratt, Crane Power Line Safety Organization, presented laws from several U.S. states requiring insulating links and questioned whether any two of the options in the "menu" of proposed safety measures would be sufficient for operating where the crane or load could get within 20 feet of the Table A distance of a power line. He also stated that insulating links cost 1-2% of crane costs. He suggested that insulating links be added to the list of safety devices required by §1414.

Tom Chamberlain, Northrop Grumman-Newport News Shipbuilding, recommended that the Committee require overhead and gantry cranes to be tagged out of service during maintenance. He also stated that computer aids that control braking on overhead and gantry cranes sometimes fail, and that a secondary device must be retrofitted to prevent accidents due to this failure.

Palmer Hickman, National Joint Apprenticeship & Training Committee, spoke against excluding power line work covered by Subpart V from the Power line safety requirements set forth in Subpart N. He stated that Subpart V, which covers power line work, is less stringent than the draft Subpart N text.

Logistics

Meeting Dates and Locations: The final C-DAC meeting will be held Tuesday - Friday, July 6-9 at the U.S. Department of Labor, Francis Perkins Building, 200 Constitution Ave, NW, Washington, DC. The meeting will begin each day at 8:30 am and end at 5:00 pm, except for Tuesday, July 6, which will begin at 1pm.

Next Steps

Documents: The approved May 4-7 meeting summary will be distributed as final. The facilitators will draft the meeting summary for this meeting and the

July meeting agenda for distribution prior to the July meeting. OSHA will distribute the revised version of the standard as soon as it is available.

Operator Qualifications Work Group: will meet June 30 in Baltimore. (Note: After the Phoenix C-DAC meeting, the Work Group meeting was cancelled.)

Power Line Safety - exclusion for work covered by Subpart V: CDAC members will review the revised draft to compare the proposed requirements of Subpart N to Subpart V.

Derricks Work Group: will reconvene by conference call before the July meeting to review draft regulatory text.

Floating Cranes & Cranes on Barges Work Group: will reconvene by conference call before the July meeting to review draft regulatory text.

Definitions: CDAC members will provide comments on this section to OSHA by Friday, June 18th.

C-DAC Attendance – June 1-4, 2004

Present:

Michael Brunet, Manitowoc Cranes, Inc., Crane Manufacturers (AEM/CIMA)
Stephen P. Charman, Viacom Outdoor, Inc., Outdoor Advertising Association of
America (OAAA)

Joseph Collins, Zachry Construction Corporation, American Road and
Transportation Builders (ARTBA)

Noah Connell, U.S. Department of Labor/OSHA

Peter Juhren, Morrow Equipment Company, L.L.C.

Bernie McGrew, Link-Belt Construction Equipment Co

Larry Means, Wire Rope Technical Board, ASME

Brian Murphy, Sundt Construction, Associated General Contractors (AGC)

George R. "Chip" Pocock, C.P. Buckner Steel Erection, Steel Erectors Association
of America

David Ritchie, The St. Paul Companies, Training and Testing

Emmett Russell, International Union of Operating Engineers

Dale Shoemaker, Carpenters International Training Center

William Smith, Maxim Crane Works

Craig Steele, Schuck & Sons Construction Company, Inc., National Association of
Home Builders (NAHB)

Wallace Vega, III, Entergy Corporation, Inc.

William J. "Doc" Weaver, National Electrical Contractors Association, Inc.

Robert Weiss, Cranes Inc. and A.J. McNulty & Company, Inc., Allied Building
Metal Industries

Doug Williams, Buckner Heavylift Cranes, Specialized Carriers and Rigging
Association

Stephen Wiltshire, Turner Construction Company, Associated Builders and
Contractors

Charles Yorio, Acordia

Susan Podziba, Facilitator, Susan Podziba & Associates

Alexis Gensberg, Facilitator, Susan Podziba & Associates

Absent:

Stephen Brown, International Union of Operating Engineers

Frank Migliaccio, International Association of Bridge, Structural, Ornamental
and Reinforcing Iron Workers

Darlaine Taylor, Century Steel Erectors, Co., Association of Union Constructors

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