



United States of America
OCCUPATIONAL SAFETY AND HEALTH REVIEW COMMISSION
1120 20th Street, N.W., Ninth Floor
Washington, DC 20036-3457

SECRETARY OF LABOR,

Complainant,

v.

OSHRC Docket No. 16-1587

TNT CRANE & RIGGING, INC.,

Respondent.

ON BRIEFS:

Amy S. Tryon, Senior Attorney; Charles F. James, Counsel for Appellate Litigation; Edmund C. Baird, Associate Solicitor of Labor for Occupational Safety and Health; Kate O'Scannlain, Solicitor of Labor; U.S. Department of Labor, Washington, DC
For the Complainant

Pamela D. Williams, Attorney; Travis W. Vance, Esq.; Fisher & Phillips LLP, Charlotte, NC and Houston, TX
For the Respondent

DECISION AND REMAND ORDER

Before: SULLIVAN, Chairman; ATTWOOD and LAIHOW, Commissioners.

BY THE COMMISSION:

TNT Crane & Rigging, Inc. is a crane service provider based in Houston, Texas. After a TNT employee was electrocuted and suffered serious injuries when the boom of a crane was lowered and the hoist line contacted a power line, the Occupational Safety and Health Administration conducted an inspection and issued TNT a citation alleging two serious violations. Item 1 alleges a violation of 29 C.F.R. § 1926.1407(b)(3) for exposing employees to the hazard of electrical shock by failing to use at least one of the measures required to prevent encroachment or contact with the power lines while disassembling the crane. Item 2 alleges a violation of 29 C.F.R.

§ 1926.1407(d) for placing “[p]art of a crane/derrick, load line, or load (including rigging and lifting accessories) whether partially or fully assembled, . . . closer than the minimum approach distance under Table A (see 1926.1408) to a power line.”

Administrative Law Judge Brian A. Duncan vacated both citation items on the grounds that the cited provisions did not apply to the work being done by TNT at the time of the accident. For the reasons discussed below, we reverse the judge’s decision and remand the case for further proceedings.

BACKGROUND

On the day of the accident, two TNT employees, a spotter/rigger and a crane operator, finished a week-long project involving the installation of new antennas on a communications tower in Georgetown, Texas. The employees used a Grove GMK all-terrain 275-ton mobile crane to perform this work. With the project complete, the next task was to disassemble the crane for transport.

To assist with the crane’s disassembly, TNT sent two additional employees—a second spotter/rigger (“SR2”) and a driver/rigger—to the site. All four employees met to discuss a plan for “breaking the crane down” and loading it onto a semi-truck trailer. The agreed-upon plan called for the crane operator to first place the pulley “block” that was connected to the hoist line on the ground near the crane so that it could be removed from the hoist line. To land the pulley block at a location near the crane, the operator would retract the (telescopic) boom, raise the angle of the boom, and then lower the block to the ground. The hoist line’s “beckett,” a metal connector that attaches the end of the hoist line to the block, would then be detached from the block. Next, the boom would be lowered so that the “jib extensions”—lattice sections attached with steel pins to the end of the boom—would rest on the trailer’s flatbed. While lowering the boom, SR2 would hold the beckett at the end of the hoist line to keep the line taut as the boom descended. Once the boom was fully lowered, another crane (referred to as a “helper crane” or “assist crane”) would be used to assist in the removal of the pins and the jib extensions.

The crew executed the first step of the plan—removing the pulley block. Then SR2 held onto the hoist line as the crane operator lowered the boom so that the jib extensions could be removed. While the boom was being lowered, the hoist line held by SR2 contacted a 14,400-volt power line, electrocuting him. SR2 was hospitalized with severe burns and other serious injuries.

I. DISCUSSION

The two cited provisions, § 1926.1407(b)(3)¹ and § 1926.1407(d)², are contained in a section of the Cranes and Derricks in Construction standard entitled “Power line safety (up to 350kV) – assembly and disassembly.” The judge agreed with TNT that these provisions do not apply to the specific activity its crew was engaged in at the time of the accident—lowering the crane’s boom—because at that point, they had not yet begun to physically disassemble the crane. We turn first to the issue of whether the meaning of “disassembly” under the crane standard is plain.

A. Plain meaning

When determining the meaning of a standard, the Commission first looks to its text and structure. *Superior Masonry Builders, Inc.*, 20 BNA OSHC 1182, 1184 (No. 96-1043, 2003); *Unarco Commercial Prods.*, 16 BNA OSHC 1499, 1502-03 (No. 89-1555, 1993). “If the meaning of [regulatory] language is ‘sufficiently clear,’ the inquiry ends there.” *Beverly Healthcare-Hillview*, 21 BNA OSHC 1684, 1685 (No. 04-1091, 2006) (consolidated) (citation omitted), *aff’d in relevant part*, 541 F.3d 193 (3d Cir. 2008). But, “in situations in which the meaning of

¹ The standards covering assembly and disassembly of cranes and derricks are found at 29 C.F.R. §§ 1926.1403 through 1926.1407. Under paragraph (3) of § 1926.1407(b)—titled “*Preventing encroachment/electrocution*”—the employer must implement one of five listed measures and is required to select a “measure . . . from th[e] list [that is] effective in preventing encroachment.” 29 C.F.R. § 1926.1407(b)(3). The five measures are: (1) use of a dedicated spotter who is in continuous contact with the equipment operator (with four listed requirements for the spotter); (2) a proximity alarm set to give the operator sufficient warning to prevent encroachment; (3) a device that automatically warns the operator when to stop movement, such as a range control warning device, that is set to give the operator sufficient warning to prevent encroachment; (4) a device that automatically limits range of movement, set to prevent encroachment; and (5) an elevated warning line, barricade, or line of signs, in view of the operator, equipped with flags or similar high-visibility markings. *See* 29 C.F.R. § 1926.1407(b)(3)(i)-(v).

² Section 1926.1407(d) states:

Assembly/disassembly inside Table A clearance prohibited. No part of a crane/derrick, load line, or load (including rigging and lifting accessories), whether partially or fully assembled, is allowed closer than the minimum approach distance under Table A (*see* § 1926.1408) to a power line unless the employer has confirmed that the utility owner/operator has deenergized and (at the worksite) visibly grounded the power line.

regulatory language is not free from doubt,” the provision is considered ambiguous. *Martin v. OSHRC (CF&I)*, 499 U.S. 144, 150-51 (1991) (brackets omitted); *Exelon Generation Co. v. Local 15*, 676 F.3d 566, 570 (7th Cir. 2012) (“A regulation is ‘ambiguous’ as applied to a particular dispute or circumstance when more than one interpretation is ‘plausible’ and ‘the text alone does not permit a more definitive reading.’ ” (citation omitted)). The Secretary’s interpretation of an ambiguous provision is entitled to deference if it is reasonable. *CF&I*, 499 U.S. at 150-51; *Delek Refining, Ltd. v. OSHRC*, 845 F.3d 170, 175 (5th Cir. 2016).

The definition section of the crane standard includes “Assembly/Disassembly” and states as follows:

Assembly/Disassembly means the assembly and/or disassembly of equipment covered under this standard. With regard to tower cranes, “erecting and climbing” replaces the term “assembly,” and “dismantling” replaces the term “disassembly.” Regardless of whether the crane is initially erected to its full height or is climbed in stages, the process of increasing the height of the crane is an erection process.

29 C.F.R. § 1926.1401. The judge viewed this definition as circular because, in his view, it uses the term “disassembly of equipment” to define the term “disassembly” and therefore, he found the meaning of the term to be ambiguous. On review, the Secretary agrees with the judge that the term is ambiguous but claims his interpretation is entitled to deference, while TNT argues that “the plain meaning of ‘disassembly,’ as determined from the [standard’s] definition of the term and the regulatory text, is that disassembly does not begin until the crane is being physically disassembled.” In particular, TNT argues that the reference to the removal of pins in § 1926.1404(f) and (h) and § 1926.1405 establishes that “disassembly” is limited to the actual removal of the crane’s components.

We disagree with both parties in that we find the meaning of “disassembly” as applied to the facts of this case to be plain and the work being done at the time of the accident to fall within that meaning under the crane standard. Contrary to TNT’s claim, the standard makes no attempt to substantively define either “assembly” or “disassembly”—the first line of the definition simply identifies the slash used in the term “Assembly/Disassembly” as meaning “and/or” (“Assembly/Disassembly means the assembly *and/or* disassembly of the equipment covered under

this standard.”).³ 29 C.F.R. § 1926.1401 (emphasis added). Nonetheless, an examination of the text and structure of the crane standard makes clear that the meaning of “disassembly” is not limited to the time during which crane components are being physically separated. *See FDA v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120, 132 (2000) (“[A] reviewing court should not confine itself to examining a particular statutory provision in isolation. The meaning—or ambiguity—of certain words or phrases may only become evident when placed in context.”); *Am. Fed’n of Gov’t Employees, Local 2782 v. Fed. Labor Relations Auth.*, 803 F.2d 737, 740 (D.C. Cir. 1986) (“[R]egulations are to be read as a whole with ‘each part or section . . . construed in connection with every other part or section.’ ” (citation omitted)); *see also Otis Elevator Co.*, 24 BNA OSHC 1081, 1086, 1087 n.10 (No. 09-1278, 2013) (reviewing language of the cited provision “along with the structure and context of the standard” to determine the scope of the standard), *aff’d*, 762 F.3d 116 (D.C. Cir. 2014).

For example, the provision cited here under Item 2 expressly applies to a fully assembled crane: “[n]o part of a crane/derrick, load line, or load . . . *whether partially or fully assembled*, is allowed closer than the minimum approach distance under Table A” 29 C.F.R. § 1926.1407(d) (emphasis added). Under another provision, the requirement that an assembly/disassembly supervisor address the hazard posed by a loss of backward stability is expressly *not* limited to when components are being attached or removed. Rather, this hazard must be addressed “before swinging the upperworks, [before] travel, *and* when attaching or removing equipment components.” 29 C.F.R. § 1926.1404(h)(11) (emphasis added). Thus, the mere fact that § 1926.1404(f) and (h) and § 1926.1405 include requirements regarding the removal of pins does not establish that “disassembly” is limited to the actual removal of a crane’s components.

Most of the other assembly/disassembly requirements, unlike § 1926.1405, do not even mention pin or component removal—those requirements are phrased broadly and by their nature require actions that must be initiated as part of the assembly/disassembly process before pin or component removal even begins. *See, e.g.*, § 1926.1404(e) (Protecting assembly/disassembly crew members out of operator view); (g) (Capacity limits); (h)(1) (Site and ground bearing

³ The definition goes on to specify substitute terms applicable to tower cranes (“erecting” and “climbing” for assembly and “dismantling” for disassembly), none of which are relevant here because the crane at issue was not a tower crane. 29 C.F.R. § 1926.1401.

conditions); (h)(4) (Verifying assist crane loads); (h)(12) (Wind speed and weather). And as the Secretary points out, § 1926.1407 expressly applies before disassembly work, including pin removal, has begun; paragraph (a) states “[b]efore assembling or disassembling equipment . . .” the employer must determine whether any part of the crane could come within 20 feet of a power line during the disassembly process. In fact, the three options listed under §1926.1407 for addressing power line safety in the assembly/disassembly process all involve actions that must take place before any actual dismantling takes place. *See* § 1926.1407(a)(1) (Option 1 requires deenergizing and grounding the power line); § 1926.1407(b)(1) (Options 2 and 3 require a planning meeting and review of encroachment/electrocution prevention measures).

Finally, the four provisions in § 1926.1405 are expressly identified as “additional requirements” for the dismantling of two specific components: “booms and jibs.” 29 C.F.R. § 1926.1405 (“Disassembly—additional requirements for dismantling of booms and jibs . . .”). As supplemental requirements with limited application, these provisions cannot be construed as defining the scope of the other assembly/disassembly requirements. *See F.T.C. v. Sun Oil Co.*, 371 U.S. 505, 515 (1963) (“There is no reason appearing on the face of the statute to assume that Congress intended to invoke by omission in [one provision] the same . . . meaning” of a term “which it explicitly provided by inclusion in [another provision]; the reasonable inference is quite the contrary.”). In short, these provisions read as a whole establish that active removal of a crane’s components is not a prerequisite for the cited provisions to apply.

Accordingly, we find that the language and structure of the crane standard’s assembly/disassembly provisions show that the steps TNT took here were part of the disassembly process and constitute work that falls within the plain meaning of disassembly.

B. Ambiguity

Even if the term “disassembly” were to be considered ambiguous, we find that the Secretary’s interpretation of the term is reasonable and therefore must be given deference. *CF&I*, 499 U.S. at 150-51; *Delek Refining*, 845 F.3d at 175. Indeed, the crane standard’s regulatory history establishes that OSHA intended the lowering of a crane’s boom to position it for dismantling to be covered under the cited provisions as disassembly work. *See U.S. Postal Serv.*, 21 BNA OSHC 1767, 1779 (No. 04-0316, 2006) (“When the language of a standard fails to provide

an unambiguous meaning, we look to the standard’s legislative history.”), citing *Oberdorfer Industr. Inc.*, 20 BNA OSHC 1321, 1328-29 (No. 97-0469, 2003) (consolidated).

In the preamble to the crane standard’s final rule, OSHA describes the precise activity at issue in this case—lowering a boom to position it for dismantling—as an example of when the assembly/disassembly powerline assessment requirement in § 1926.1407(a) is applicable:

For example, when disassembling a crane, the disassembly process takes place in an area that includes the area under and around the boom’s path *as it is lowered to the ground* (in most, but not all cases, the boom is lowered to the ground *for the disassembly process*). Under this provision, the employer must assess the proximity that the boom *will be* in to the power line *in its path of travel to* (and on) the ground.”

75 Fed. Reg. 47,906, 47,945-46 (Aug. 9, 2010) (emphasis added).⁴ And as OSHA explains in the preamble to the proposed rule, the negotiated rulemaking committee that developed the draft proposed rule had inadvertently omitted from the draft of this provision a reference to “disassembly,” and that OSHA added it to the proposed rule because “[t]he employer needs to evaluate power lines with respect to the direction or area of disassembly *when preparing to disassemble the crane.*” (Emphasis added). 73 Fed. Reg. 59,714, 59,750 (Oct. 9, 2008).

OSHA’s discussion of the prohibition against assembly/disassembly below power lines (§ 1926.1407(c)) in the final rule preamble also makes clear why that provision applies to a “fully assembled” crane: “*in both assembly and disassembly*, maneuvering an assembled crane out from under the power lines, or *maneuvering a crane that is about to be disassembled under them*, itself

⁴ As this example is directly applicable to the instant case, TNT’s claim that it lacked notice of the Secretary’s interpretation lacks merit. *See Phelps Dodge Corp.*, 11 BNA OSHC 1441, 1444 (No. 80-3203, 1983) (“Inasmuch as the language of the standard is susceptible of different meanings, the preamble is the best and most authoritative statement of the Secretary’s legislative intent.”), *aff’d*, 725 F.2d 1237 (9th Cir. 1984). The company’s argument is further undercut by the fact that the power line provisions applicable to crane *operation* are similar to the cited assembly/disassembly provisions. Specifically, for the provision at issue under Item 1 (requiring the employer to implement one of the listed additional encroachment/electrocution prevention measures), the equipment operations provision also requires implementing one of a list of additional measures, most of which are the same as in the assembly/disassembly provision. *See* 29 C.F.R. § 1926.1408(b)(4). As to the provision at issue under Item 2 (partially or fully assembled crane must not breach the Table A minimum approach distance if closer than 20 feet to power line), the equipment operations provision also states that no part of a crane, load line or load may breach the Table A minimum approach distance when working closer than 20 feet to power line. *See* 29 C.F.R. § 1926.1408(a)(2).

poses a high risk of [power line] contact.” 75 Fed. Reg. at 47,949 (emphasis added). *See Am. Sterilizer Co.*, 15 BNA OSHC 1476, 1478 (No. 86-1179, 1992) (standard’s preamble can be the “ ‘best and most authoritative statement of the Secretary’s legislative intent’ ” (citation omitted)); *see also Tops Markets, Inc.*, 17 BNA OSHC 1935, 1936 (No. 94-2527) (relying on LOTO preamble to interpret ambiguous provision), *aff’d*, 132 F.3d 1482 (D.C. Cir. 1997) (unpublished table case). This interpretation is clearly a reasonable one, as the greatest risk of encroaching a power line occurs when the boom is still extended and/or being lowered in preparation for removing the crane’s components, not after the boom is already laying on the ground or is on the bed of a helper truck. In sum, we find the regulatory history supports the Secretary’s interpretation of disassembly as a process that is not limited to physical dismantling. Under that interpretation, lowering the boom was part of TNT’s disassembly process because it was done *for* the dismantling of the jib, a task which necessarily required removal of the pins connecting the jib to the boom.

We disagree with the judge that the following statement from the final rule preamble supports his finding that the assembly/disassembly provisions apply only when components are actually being added or removed:

Irrespective of whether the [tower] crane is initially erected to its full height, or is “jumped” in stages, the process of increasing the height of the crane is an assembly/erection process. Sections 1926.1403 through 1926.1406 apply whenever the crane’s height is modified.

75 Fed. Reg. at 47,936. OSHA’s statement was in response to a commenter’s question specific to tower cranes, which is not the type of crane at issue here—whether, after a tower crane has been erected and used at one height, and sections are subsequently added to the crane to increase its height for use at a higher level, that subsequent “jumping or “climbing” (terms that are specific to tower cranes) is an “assembly” process. *See* 29 C.F.R. § 1926.1401 (definitions of “assembly/disassembly” and of “climbing”); 75 Fed. Reg. at 47,936 (“ ‘Jumping’ (or ‘climbing’) refers to the process of adding mast sections to a tower crane to increase its height.”). This language neither addresses nor suggests, as the judge found, that the assembly/disassembly standards only apply when the structural height of any type of crane is modified.⁵

⁵ The judge also relied on a statement in OSHA’s Compliance Directive, Cranes and Derricks in Construction Standard (CPL 02-01-057, Oct. 17, 2014), explaining that the provisions of §§ 1926.1403-1406 do not apply to equipment set-up and providing an example where “if the equipment operator merely unfolds and pins the boom of a fully assembled truck crane, it would

We also find the judge’s reliance on an unreviewed administrative law judge decision involving a citation under section 5(a)(1) of the Occupational Safety and Health Act, 29 U.S.C. § 654(a)(1), to be misplaced. *See Leone Constr. Co.*, 3 BNA OSHC 1979, 1981 (No. 4090, 1976) (unreviewed administrative law judge decision does not constitute binding precedent for the Commission). In *Steel Constructors, Inc.*, No. 78-3839, 1980 WL 10389 (OSHRC ALJ, Sept. 8, 1980), the general duty clause citation alleged that the employer had allowed an employee to disassemble an unsupported boom section of a truck crane. The judge vacated the citation based in part on his finding that the disassembly of the boom section had not yet begun because the equipment necessary for its dismantling had not yet been brought to the worksite and the boom was not yet resting on the ground. 1980 WL 10389 at *4. *Steel Constructors*, however, predates the existence of the crane standard at issue here, so it did not involve the term “disassembly” within the context of that standard or even an analogous standard as the case arose under the general duty clause—as such, the rulemaking and deference considerations that exist here did not pertain. In addition, the judge’s rationale was specific to the citation: he found that at the time the employee was removing pins from the boom section, the cited employer was under no obligation to institute the safety measures referenced in the citation—installing supports for the boom—because at that point the *employer* had not intended for the removal of the boom’s pins to have begun. Rather, the *employee* had unforeseeably begun to remove them on his own. *Id.* at *4-5. Therefore, *Steel Constructors* is inapposite.

Finally, in light of the crane standard’s regulatory history, we reject two other arguments raised by TNT. First, the company claims that “each witness with knowledge of the crane industry and its operations testified . . . that disassembly of the crane would not begin until the actual removal of the first section of the jib[.]” TNT does not explain the relevance of the testimony of “witnesses with knowledge of the crane industry and its operations” to this issue, specifically that of TNT vice-president for Health, Safety and Environment Troy Pierce, TNT’s expert witness Matt Gardiner, and the driver/rigger who was sent to the worksite to assist with disassembly.⁶ To the

be inappropriate to apply the [assembly/disassembly] requirements.” There is no dispute that equipment set-up was not at issue here, so this example is irrelevant.

⁶ Pierce and Gardiner testified that disassembly begins when pins are being removed. Although the driver/rigger’s testimony suggests that he also considered disassembly to begin with pin

extent TNT is arguing that the testimony of these witnesses collectively establishes that the word “disassembly” as commonly used in the construction industry does not include lowering a boom for disassembly, and that this is relevant to the meaning of “disassembly” under the crane standard, we find this claim lacks merit. The testimony of these witnesses is contradicted by the CO’s interview statements of the two employees who worked on both the completed project and the disassembly plan: the crane operator, who has 22 years of experience (“[w]e were done and began to disassemble the crane”), and the spotter/rigger (“[w]e started disassembl[ing] the crane”).⁷

Second, TNT argues that the Secretary’s interpretation of disassembly would cause “considerable confusion” in the crane industry because it is “based upon the purpose of the action taken and not on the nature of the action itself.” TNT offers no explanation for why an employer would not know if it is lowering a boom as part of a construction operation or for disassembly of the crane—indeed, there is no dispute here that TNT’s work at the site had been completed and a

removal, he stated in his signed interview statement that on the day of the accident, “we started breaking down the crane.”

At the hearing, the judge overruled the Secretary’s objection to Gardiner being qualified as an expert “to the extent [TNT is] proffering testimony about industry standards [that] are not applicable to this proceeding;” the judge qualified Gardiner “as an expert . . . on the subject matters of crane operation, crane disassembly, and compliance with OSHA crane standards and ASME standards dealing with cranes.” We find that it was error to qualify Gardiner as an expert with respect to “compliance with OSHA crane standards.” See *Goodman v. Harris Cty.*, 571 F.3d 388, 399 (5th Cir. 2009) (“[A]n expert may never render conclusions of law.”), citing *Snap-Drape, Inc. v. Comm’r*, 98 F.3d 194, 198 (5th Cir. 1996); *Erickson Air-Crane, Inc.*, No. 07-0645, 2012 WL 762001, at *3 n.7 (OSHRC, Mar. 2, 2012) (finding judge properly excluded expert testimony consisting of legal opinion). Similarly, to the extent TNT is claiming that the driver/rigger and Pierce opined that the cited provisions do not apply to lowering the boom for disassembly, and that their opinions in this regard are relevant to this issue, its argument is rejected. *Id.*

⁷ The testimony TNT relies on is also contradicted and outweighed by the fact that the negotiated rulemaking committee (“C-DAC”) tasked with developing the crane standard was comprised of industry stakeholders, including construction crane users, owners, manufacturers, and operators (including two representatives of the International Union of Operating Engineers), all of whom had many years of relevant experience. See 75 Fed. Reg. at 47,907-09. C-DAC, whose composition was designed to be representative of the construction crane industry, see 75 Fed. Reg. at 47,909, chose to include a “fully assembled” crane in § 1926.1407(d) and the backward stability requirement (which is applicable even before any component is removed) in § 1926.1404(h)(11), and submitted no comments objecting to OSHA’s statement in the proposed rule preamble that the assembly/disassembly power line assessment requirement would apply to lowering the boom for disassembly. See 75 Fed. Reg. at 47,945-46.

crane disassembly plan developed and agreed to by the crew, two of whom were sent to the site by the company solely to assist with disassembling the crane. As such, all of the employees were aware that the boom was being lowered pursuant to their plan for disassembling the crane.

For these reasons, we conclude that the Secretary's interpretation of § 1926.1407 accords with the plain meaning of the standard and, even if the standard is ambiguous in this regard, the Secretary's interpretation is reasonable and entitled to deference. *See CF&I*, 499 U.S. at 150-51. Accordingly, we reverse the judge, find that the cited provisions are applicable here, and remand this case for further proceedings.

SO ORDERED.

/s/
James J. Sullivan, Jr.
Chairman

/s/
Cynthia L. Attwood
Commissioner

/s/
Amanda Wood Laihow
Commissioner

Dated: March 27, 2020

Some personal identifiers have been redacted for privacy purposes

UNITED STATES OF AMERICA

OCCUPATIONAL SAFETY AND HEALTH REVIEW COMMISSION

SECRETARY OF LABOR,

Complainant,

v.

TNT CRANE & RIGGING, INC.,

Respondent.

DOCKET NO. 16-1587

Appearances:

Christopher Lopez-Loftis, Esq. U.S. Department of Labor, Office of the Solicitor, Dallas, Texas

For Complainant

Collin G. Warren, Esq., Travis W. Vance, Esq., Fisher & Phillips, LLP, Houston, Texas

For Respondent

Before: Administrative Law Judge Brian A. Duncan

DECISION AND ORDER

Procedural History

On May 15, 2016, Respondent's employees were installing new antennas on a communications tower using a 275-ton mobile crane in Georgetown, Texas. An employee was on the ground holding the end of the crane's hoist line, while the crane operator was lowering the boom, when it contacted a nearby electric line. The employee was seriously injured by the

electrical shock, and hospitalized. Four days later, on May 19, 2016, OSHA assigned Compliance Safety and Health Officer (CSHO) Darren Beck to begin an investigation of the incident. (Tr. 59). As a result of his investigation, OSHA issued a *Citation and Notification of Penalty* to Respondent alleging two violations of the Occupational Safety and Health Act of 1970, 29 U.S.C. § 651 *et seq.* (“the Act”).

OSHA alleged a serious violation of 29 C.F.R. §1926.1407(b)(3) for failing to prevent the encroachment of power lines during crane disassembly; and a serious violation of 29 C.F.R. §1926.1407(d) for failing to maintain minimum approach distances from power lines during disassembly, with total proposed penalties of \$24,942.00. Respondent timely contested the *Citation*, which brought the matter before the United States Occupational Safety and Health Review Commission (“Commission”) pursuant to Section 10(c) of the Act.

A trial was conducted in Houston, Texas on December 20–21, 2017. Seven witnesses testified at trial: (1) CSHO Darren Beck; (2) Freddie Ray, a driver and rigger for Respondent; (3) Jeff Benson, a crane operator and former employee of Respondent; (4) Troy Pierce, Respondent’s Vice President of Health Safety and Environment; (5) Matt Gardiner, Respondent’s designated crane expert; (6) Jamie Arnold, Respondent’s Branch Manager of the Marshall, Texas yard; and (7) Jeff Bonner, one of Respondent’s safety managers. Both parties timely submitted post-trial briefs for the Court’s consideration.

Jurisdiction & Stipulations

The parties stipulated the Commission has jurisdiction over this proceeding pursuant to Section 10(c) of the Act. (Tr. 18). The parties also stipulated that, at all times relevant to this

proceeding, Respondent was an employer engaged in a business and industry affecting interstate commerce within the meaning of Sections 3(3) and 3(5) of the Act, 29 U.S.C. §652(5). (Tr. 18–19). See *Slingluff v. OSHRC*, 425 F.3d 861 (10th Cir. 2005).

Factual Background

On May 15, 2016, Respondent’s employees Jeff Benson and Mark Ryan were completing a week-long project to install new antennas on top of a communications tower in Georgetown, Texas. (Tr. 58, 313, 529). Mr. Benson, Respondent’s Crane Operator, was operating a Grove GMK 5275 all-terrain 275-ton mobile crane to perform the work. (Tr. 320; Exs. C-16, C-17). About 9:00 a.m. that day, employees [Redacted] and Freddie Ray, who were detailed from Respondent’s San Antonio office, arrived at the worksite to assist in disassembling the mobile crane once the job was completed. (Tr. 202–203, 254).

Once finished, the crew needed to dismantle the crane and re-load it back on the semi-truck trailer used to transport it. (Tr. 96, 254). Before starting that process, the crew conducted a job safety analysis (JSA) and discussed a plan for lowering and disassembling the boom of the crane, including the need to avoid the nearby power lines. (Tr. 203–206; Ex. R-4). Though [Redacted] and Mr. Ray expressed reservations about the plan, Mr. Benson informed them he had assembled the crane in the exact location where he proposed disassembling the crane, and the plan included a buffer zone of 20 feet from the power line.⁸ (Tr. 214).

⁸. Because the voltage of the power line was 14,400 volts, the required minimum distance was 10 feet per Table A of 29 C.F.R. §1926.1408. Respondent’s employees testified that they aimed for a larger buffer area. (Tr. 259).

On this particular crane model, the operator's cabin sits on a turntable on the truck, which allows it to rotate left and right. (Tr. 207, 320). Affixed to the turntable is a telescoping boom, which extends and retracts by way of a hydraulic cylinder. (Tr. 207; Ex. C-17). According to Mr. Ray, the boom remains permanently affixed to the crane. (Tr. 207). There was also a jib on the crane, which consisted of extension sections that attach to the end of the boom for more reach. (Tr. 208; Ex. C-16). In contrast to the boom, the jib is not permanently affixed to the crane. Instead, the jib sections are connected by a series of pins during the assembly process, and then removed during the disassembly process. (Tr. 207; Ex. C-16). The jib pins are substantial pieces of steel bar which are inserted and removed with a hammer. (Tr. 207).

The disassembly plan called for Mr. Benson to first reposition the crane near the semi-truck trailer; then to lower the boom while [Redacted], the spotter, removed the block from the beckett on the end of the hoist line. (Tr. 88). The block is the end mechanism on a crane, where rigging is attached to pick up whatever items the crane is lifting. (Tr. 199, 328; Exs. C-16 (TNT 102), C-17 (DOL 187)). The beckett is a metal connection device at the end of the hoist line, where the block is connected. (Tr. 209, 328). Then, while [Redacted] physically held the beckett to keep the hoist line taught, it was to be retracted onto the coil.⁹ (Tr. 209, 211, 315). From operators to the expert, all of Respondent's witnesses testified that simply lowering the boom and disconnecting the block, are normal operations that can occur multiple times over the course of a single day. (Tr. 224, 264, 536).

⁹. Mr. Ray testified that removing the block was an unnecessary step in the process that actually increased the likelihood of an accident. The block in question weighed nearly 500 pounds, which would have maintained adequate tension on the hoist line while it was retracted, eliminating the need for [Redacted] to hold the line. (Tr. 231-233).

After the block was removed and the hoist line retracted, the *plan* was to further lower the boom, use a separate helper crane to begin taking off sections of the jib, and place them on the trailer. (Tr. 227, 262, 315, 486-487, 553; Ex. R-4). Disassembly of this crane is a progressive process, which involves raising/lowering the boom after each successive section of the jib had been removed and set on the trailer. (Tr. 207–208). This description of the process was echoed by Matthew Gardiner, Respondent’s expert. (Tr. 538–539). Mr. Gardiner, Mr. Pierce, and Mr. Ray testified at trial that the actual removal of the first section of jib is when crane “disassembly” actually begins. (Tr. 207-208, 467, 540-541).

However, despite this disassembly plan, the crew never progressed past the removal of the block and the beginning of the retraction of the hoist line. Neither the boom or jib was ever laid onto the trailer, no sections of jib were removed, and no jib section pins were knocked out. (Tr. 261-262). As the crane operator was lowering the boom and retracting the hoist line, it contacted a nearby power line, sending 14,000 volts of electricity through the hoist line to [Redacted]. (Tr. 108, 211–212). Mr. Ray, who was in the cab of the semi-truck awaiting instructions from Mr. Ryan, quickly ran over to [Redacted]’s location. (Tr. 211-212). After emergency responders arrived and had the original crew move the crane and other equipment for access purposes, the entire crew was sent home. (Tr. 268). Respondent had a different crew come to the site a day later to disassemble the crane and remove it from the property. (Tr. 381).

[Redacted] experienced a severe electrical shock, serious injuries, and hospitalization. (Tr. 213, 379–80). The crane operator was not injured. Respondent reported the accident and employee hospitalization to OSHA within 24 hours, which prompted the investigation.

By the time CSHO Beck arrived at the worksite, the equipment and parties involved in the incident were no longer there. (Tr. 57). He also testified that he was unable to enter the locked property. (Tr. 138). Therefore, instead of performing an inspection at the location of the accident, CSHO Beck traveled to Respondent's Houston, TX office, to interview witnesses; and to Respondent's Marshall, TX yard, where the crane was being stored. (Tr. 57). The Court notes that this was CSHO Beck's first crane accident inspection. (Tr. 54).

When CSHO Beck spoke with members of the crew, they apparently used phrases like "began to disassemble" and "started breaking down the crane," which led him to conclude they were engaged in crane disassembly at the time of the accident. (Tr. 88-94). CSHO Benson's conclusions were wholly reliant upon witness interviews. He did not actually know whether the crane was fully assembled, partially disassembled, or completely disassembled at the time of the accident. (Tr. 133). When asked during the trial how he knew the crew was actually disassembling the crane at the time of the accident, CSHO Beck testified that "...whenever you start getting close to power lines, that's when the disassembly starts to occur. If they weren't disassembling the crane, then what else were they doing?" (Tr. 153).

The facts presented at trial, however, clearly established that disassembly of the crane was *about* to begin, but had not actually started. To reiterate, neither the boom or jib had been set on the trailer, the crane boom and jib were still suspended and under tension, none of the sections of jib had been removed, and none of the pins connecting each jib section had been knocked out. The crane was fully intact and operational, except for the removal of the block at the end of the hoist line. (Tr. 264).

In addition to interview statements, CSHO Beck took photos of a not-to-scale model of the worksite prepared by Mr. Ray and a member of Respondent's safety team, and took photographs of the crane as it set in the Marshall, TX yard. (Tr. 95, 243-44; Ex. C-21). None of the photographs entered into the record accurately reflect the condition, configuration, or position of the crane at the time of the accident. (Exs. C-16, C-17). Based on his investigation, CSHO Beck concluded that Respondent failed to comply with two regulatory requirements for crane disassembly, and OSHA issued the two violations at issue in this case.

Discussion

To establish a violation of an OSHA standard, Complainant must prove, by a preponderance of the evidence, that: (1) the cited standard applied to the facts; (2) the employer failed to comply with the terms of the cited standard; (3) employees were exposed or had access to the hazard covered by the standard, and (4) the employer had actual or constructive knowledge of the violative condition (*i.e.*, the employer knew, or with the exercise of reasonable diligence could have known). *Atlantic Battery Co.*, 16 BNA OSHC 2131 (No. 90-1747, 1994).

The first (and primary) issue here is whether the regulation cited in both alleged violations, 29 C.F.R. §1926.1407, applied to the work being performed by Respondent's crew at the time of the accident. Even CSHO Beck acknowledged during the trial that if Respondent's crew was not engaged in "disassembly," then the *Citations* issued to Respondent were improper. (Tr. 134). The regulation cited here falls under the category of "Cranes and Derricks in Construction" and is entitled "Power line safety (up to 350 kV)—assembly and disassembly." 29 C.F.R. §1926.1407 *et seq.*

Complainant argues that the process of crane “disassembly” began in this case when the block at the end of the hoist line was removed, and the boom began to be lowered. *Compl’t Br.* at 11. According to Complainant, once the crew discussed the disassembly plan, then took their first physical steps toward accomplishing that plan, their actions were covered by the disassembly regulations. Respondent argues in opposition, that “disassembly” is not defined in the regulations, and that the simple act of lowering the boom and removing the block at the end of the hoist line is a common practice during normal operation of this and other cranes. (Tr. 264, 466). For a Court to conclude that lowering the boom and removing/changing a block, constitutes crane disassembly would have far-reaching implications in the crane industry, and is contrary to the regulations. Respondent does not dispute that the crane was *about to be* disassembled at the time of the accident, but that *actual* disassembly had not yet begun when the accident occurred.

Plain Language of “Assembly/Disassembly”

To determine a standard’s meaning, “the Commission must first look to its text and structure.” *Seward Ship’s Drydock, Inc.*, 26 BNA OSHC 2303 (No. 09-1901, 2018) (citations omitted). If the language of the standard is unambiguous, then the plain meaning shall govern, irrespective of what definition the Secretary may propose. *Id.* According to the definition section of Subpart CC—Cranes and Derricks in Construction, “Assembly/Disassembly” means:

the assembly and/or disassembly of equipment covered under this standard. With regard to tower cranes, “erecting and climbing” replaces the term “assembly” and “dismantling” replaces the term disassembly.” Regardless of whether the crane is initially erected to its full height or is climbed in stages, the process of increasing the height of the crane is an erection process.

29 C.F.R. §1926.1401.

The first sentence in the definition is circular, and provides no clarification, because it uses the term “disassembly of equipment” to define the term “disassembly.” Even CSHO Beck agreed that “disassembly” is not clearly defined in the regulation. (Tr. 174). The next two sentences, however, provide some texture to its meaning. Specifically, the assembly process for tower cranes (not the type used here), involves “the process of increasing the height of the crane.” Conversely, logic dictates that decreasing the height of the crane would constitute disassembly. Unfortunately, with regard to the mobile crane used in this case, the definition does not explain how assembly/disassembly would differ from normal crane operation, during which the boom is raised and lowered repeatedly.

Notwithstanding the vagueness of the term “assembly/disassembly” in the standard, OSHA created, in promulgating the regulations, an intentional dividing line between assembly/disassembly and normal crane operation. There are four other subsections of subpart CC that address the assembly/disassembly process. *See id.* §§1926.1403–.1406. The one standard specifically applicable to disassembly—§1926.1405—seems to further clarify that dividing line. In each subsection of §1926.1405, employers are admonished that “none of the pins” on various sections of the crane boom or pendants can be removed without adequate support or while the components are under tension. *See id.* §1926.1405(a)–(d). The previous section, after discussing the prerequisites for supervision and procedures, also highlights the removal of pins as part of the disassembly process. *See id.* §1926.1404(f). The language

contained in §1926.1405 seems to support Respondent's argument that crane disassembly does not begin until the first connective pin is removed.

Regulatory History and Prior Interpretations

Because the plain language of the term "disassembly" is ambiguous in the cited standard, the Court will typically defer to Complainant's interpretation so long as it is reasonable. *See Martin v. OSHRC (CF&I Steel)*, 499 U.S. 144, 151 (1991) (citing *Ehlert v. United States*, 402 U.S. 99, 105 (1971)). In other words, so long as the Court determines the interpretation "sensibly conforms to the purpose and wording of the regulation", while also taking into account "whether the Secretary has consistently applied the interpretation embodied in the citation", "the adequacy of notice to regulated parties", and "the quality of the Secretary's elaboration of pertinent policy considerations", then Complainant's interpretation will be upheld. *See Seward Ships Drydock, Inc., supra; CF&I, supra*). Complainant's interpretation in this case, however, does not hold up to such scrutiny.

According to the Commission, if "a standard is susceptible to different interpretations, the Commission will consider statements made in the preamble to the standard as the most authoritative guide to the standard's meaning." *Safeway Store No. 914*, 16 BNA OSHC 1504, 1511 (No. 91-373, 1993) (citing *Am. Sterilizer Co.*, 15 BNA OSHC 1476, 1478 (No. 86-1179, 1992)). The preamble to the final rule, as well as other interpretive documents issued by Complainant, provide additional clarification regarding the issue of when assembly/disassembly operations begin and serve to further undermine Complainant's position that removal of the block and lowering of the boom constituted disassembly.

At the beginning of the preamble's discussion of the assembly/disassembly standards found at §1926.1403–.1406, the Secretary notes:

Irrespective of whether the crane is initially erected to its full height, or is 'jumped' in stages, the process of increasing the height of the crane is an assembly/erection process. Sections 1926.1403 through 1926.1406 apply whenever the crane's height is modified. To ensure that this intent is reflected in the standard, OSHA has added a sentence to the definition of "assembly/disassembly" in §1926.1401 to this effect.

75 Fed. Reg. at 47936. Thus, as discussed earlier, the assembly/disassembly standards apply whenever the structural height of the crane is modified. This is further clarified in the preamble's discussion of §1926.1405, which addresses the removal of pendant, boom, and jib pins and the hazards associated therewith. *Id.* at 47944. Specifically, the preamble notes that the standard applies whether a crane is being disassembled or whether the length of the boom/jib is being modified. *Id.* The language focuses on the addition or removal of *structural* components, i.e., pins, and provides a strong indication that mere removal of the block and lowering of the boom is insufficient for application of the cited standards. Merely extending or retracting the boom, would not constitute such a structural change. Indeed, Complainant's own *Compliance Directive* indicates that a mobile truck crane with a fully assembled boom, which only needs to be unfolded and pinned, does not even go through the assembly/disassembly process covered by the cited regulations. (Ex. R-34, p. 20 "Equipment Set-up...if the equipment operator merely unfolds and pins the boom of a fully assembled truck crane, it would be inappropriate to apply [assembly/disassembly] requirements.").

Case Law

Both parties cite to a single case on crane disassembly, albeit with different interpretations. Though it is not a Commission decision, and was issued prior to the promulgation of these crane regulations, the Court finds it relevant and persuasive. In *Steel Constructors, Inc.*, an ALJ was presented with an issue similar to the one at bar: whether, at the time of a crane accident, the employer was disassembling the crane. *Steel Constructors, Inc.*, 8 BNA OSHC 2146 (No. 78-3839, 1980) (ALJ Bobrick). In that case, the jib of a crane had been removed, and preparations were being made to dismantle the boom. *Id.* The boom was suspended 5-6 feet above the ground in a horizontal position. *Id.* Meanwhile, the motor was shut down and the controls were locked out to allow the crew to gather the necessary tools for dismantling the boom. Around that time, one employee unexpectedly began knocking out connection pins, which caused the boom to collapse.

The employer was cited under the general duty clause for failing to securely block or support the boom during dismantling operations. The *Steel Constructors* ALJ ultimately concluded that the employer was not engaged in crane disassembly at the relevant time. In vacating the citation, the ALJ was persuaded by the fact that the crane controls were locked out; that it was in an elevated, suspended position; that preparations were still being made for the eventual dismantling of the boom; and because it was the regular practice of Respondent to dismantle the boom while it was resting securely on the ground. *Id.*

Although certain facts are distinguishable, the Court agrees with Respondent's interpretation and application of *Steel Constructors*. The record establishes that Respondent, in the present case, was merely in the process of setting up and positioning its equipment to *begin*

the process of disassembling the crane. Respondent, in the present case, had not gone nearly so far down the road towards disassembly as the *Steel Constructors* employer, which had already removed the jib from the boom. Respondent, in the present case, simply had not begun to alter the structure of the crane.

Conclusion

The Court finds Complainant failed to establish the first *prima facie* element required to provide each of the alleged violations: applicability of the cited standard. Complainant's interpretation of the standard, at least as expressed in this case through the *Citation*, unreasonably attempts to expand the scope of 29 C.F.R. §1926.1407; is inconsistent with the preamble and language of the crane disassembly regulation; and is inconsistent with Complainant's own interpretive guidance. Since Complainant failed to establish that the cited regulation applied to the work being performed, the Court declines to address the other claims and defenses argued by the parties in their post-trial briefs.

Order

Based upon the foregoing Findings of Fact and Conclusions of Law, it is ORDERED that:

1. Citation 1, Item 1 is VACATED; and
2. Citation 1, Item 2 is VACATED.

Date: September 14, 2018
Denver, Colorado

/s/
Judge Brian A. Duncan
U.S. Occupational Safety and Health Review Commission