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 Nos. 91-2834E & 91-2950
GENERAL MOTORS CORP., CPCG OKLAHOMA CITY PLANT, Respondent.	:	
INTERNATIONAL UNION, UNITED AUTOMOBILE, AEROSPACE & AGRICULTURAL IMPLEMENT WORKERS OF AMERICA – UAW and LOCAL 1999, Authorized Employee Representative	:	

APPEARANCES:

Kenneth A. Hellman and Nicholas J. Levintow, Senior Trial Attorneys; Joseph M. Woodward, Associate Solicitor for Occupational Safety and Health; Thomas S. Williamson, Jr., Solicitor of Labor, U.S. Department of Labor, Washington, DC
For the Complainant

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For the Respondent

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For the Authorized Employee Representative

DECISION

Before: THOMPSON, Chairman; ROGERS, Commissioner.
BY THE COMMISSION:

I. STATEMENT OF THE CASE

Early on the morning of April 4, 1991, at a General Motors Corporation ("GM") automobile manufacturing plant in Oklahoma City, Oklahoma, a motor rail conveyor lift table activated, catching the head of millwright Donald Smith, and killing him instantaneously. As a result of this fatality, the Occupational Safety and Health Administration ("OSHA") conducted an inspection of the GM plant. On September 26, 1991, nearly six months after the accident, OSHA issued to GM a single willful citation, under the Occupational Safety and Health Act of 1970 ("the Act"), 29 U.S.C. §§ 651-678, alleging fifty-seven violations of the general industry lockout/tagout ("LOTO") standard, 29 C.F.R. § 1910.147.[1]

The LOTO standard, which became effective January 2, 1990, was promulgated to prevent industrial accidents during servicing of machines that remain in an operational mode, are turned off but connected to a power source, retain stored energy, or are reactivated by another worker unaware that servicing is in progress. Control of Hazardous Energy Sources (Lockout/Tagout): Final Rule ("Lockout/Tagout I"), 54 Fed. Reg. 36,644 (Sept. 1, 1989); Control of Hazardous Energy (Lockout/Tagout): Final Rule; Suspension of Effective Date ("Lockout/Tagout II"), 54 Fed. Reg. 46,610, (Nov. 6, 1989). In general, the LOTO standard requires an employer to establish a program that includes employee training, use of energy control procedures, and periodic inspections designed to prevent employee exposure to the unexpected energization of equipment during servicing and maintenance operations, and dovetails with the requirements for the safe operation of machines during production, as prescribed by 29 C.F.R. Part 1910, subpart O.

The violations alleged here encompass GM's failure to apply LOTO during the events leading up to the accident, as well as GM's failure to establish an energy control program, utilize and adequately describe its energy control procedure, conduct a periodic inspection of that procedure, and train and retrain employees covered by the standard. The Secretary cited the training and retraining items on a per-employee basis and proposed penalties for all citation

[1] Under Section 9(c) of the Act, the citation here covered a six-month period ("limitations period") that began shortly before the accident. 29 U.S.C. § 658(c) ("[n]o citation may be issued under this section after the expiration of six months following the occurrence of any violation").

items totaling $2.78 million. Both GM and the authorized employee representative, the International Union, United Automobile, Aerospace and Agricultural Implement Workers of America ("UAW"), contested the citation.[2]

After a two-week hearing, Administrative Law Judge Stanley M. Schwartz[3] affirmed all violations before him, except for one retraining item and the five items related to the fatal accident.[4] He assessed a total penalty of $1.945 million. Both the Secretary and GM sought review of the judge's decision before the Commission. For the reasons that follow, we affirm the judge's decision in part, and reverse in part.

II. ISSUES

Under the citation items at issue on review, the Secretary alleges that GM willfully violated multiple provisions of the LOTO standard. The judge affirmed all but six of these items, as alleged, based on his conclusion that the plant's energy control procedure was deficient, training was inadequate, and lockout was "unenforced and seldom used before the accident." In vacating the alleged violations under 29 C.F.R. § 1910.147(d)(2), (d)(3), (d)(4)(i), (d)(5)(i), and (d)(6), the five citation items related to the accident, the judge determined that the Secretary failed to satisfy her burden to show the applicability of the cited standards to the circumstances of the accident.

The issues on review are as follows: (1) whether GM's energy control program and procedure complied with the LOTO standard; (2) whether GM failed to perform a periodic inspection; (3) whether GM failed to train or retrain, as cited, its servicing and maintenance employees; (4) whether the LOTO training and retraining provisions are susceptible to per-employee citation; (5) whether the LOTO standard applied to the motor rail conveyor work; (6) whether the affirmed citation items were properly characterized as willful; and (7) what penalty amounts are appropriate to assess for the affirmed items.

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[2] In Docket 91-2950, GM contested all the citation items, the proposed penalties, and the abatement dates. In Docket 91-2834E, the UAW elected party status and initially protested the abatement dates.

[3] The late Administrative Law Judge E. Carter Botkin presided over the hearing, but upon his death the case was reassigned to Judge Schwartz.

[4] The Secretary withdrew eight citation items by the time the judge issued his decision. The vacated retraining item is not at issue on review.

For the following reasons, we affirm the program and inspection items; affirm or vacate specific training and retraining items based on the evidentiary and legal bases discussed below; affirm the items related to the accident; recharacterize as serious the initial training violations and one sub-item relating to the energy control procedure; affirm all other violations as willful; and determine that both the initial training violations cited under 29 C.F.R. § 1910.147(c)(7)(i) and the retraining violations cited under 29 C.F.R. § 1910.147(c)(7)(iii)(B) are susceptible to citation on a per-employee basis. For the twenty-six affirmed citation items, we assess a total penalty of $692,000.

III. FINDINGS OF FACT

GM's Oklahoma City plant, which opened in 1979, employed about 5,000 workers at the time of the OSHA inspection. The plant contains hundreds of machines, many powered by multiple energy sources. "Skilled trades" employees—including millwrights, electricians, pipefitters, and toolmakers—routinely perform servicing and maintenance on these machines. In 1985, well before the cited standard was promulgated, GM laudably established as part of its joint partnership with the UAW a lockout/tagout training program superseding previous lockout training programs at the plant. GM conducted this joint training in the mid-1980s.

However, before the 1991 accident, GM management at the Oklahoma City plant did not enforce the use of lockout procedures, permitting and even encouraging employees to service machines without locking out. Supervisors observed employees servicing without locking out and took no action, neither stopping the servicing work nor retraining the employees in proper lockout procedures. GM also failed to adequately supply servicing and maintenance employees with necessary safety locks.

IV. GENERAL PRINCIPLES OF LAW

The general industry LOTO standard, effective January 2, 1990, "covers the servicing and maintenance of machines and equipment in which the *unexpected* energization or start up of the machines or equipment, or release of stored energy could cause injury to employees." 29 C.F.R. § 1910.147(a)(1)(i). The LOTO standard defines servicing and/or maintenance as "workplace activities" exposing an employee to the possibility of unexpected energization such as "constructing, installing, setting up, adjusting, inspecting" as well as "cleaning or unjamming" machines or equipment. 29 C.F.R. § 1910.147(b). Energization is "unexpected" in the absence of some mechanism to provide adequate advance notice of machine activation. *Burkes Mech.*

Inc., 21 BNA OSHC 2136, 2139 n.4 (No. 04-1475, 2007) (distinguishing *Gen. Motors Corp., Delco Chassis Div.*, 89 F.3d 313 (6th Cir. 1996)).

Under the standard, an employer is required to establish an energy control program "consisting of energy control procedures, employee training and periodic inspections to ensure" machines are securely isolated from any and all energy sources before the commencement of service and/or maintenance activities. 29 C.F.R. § 1910.147(c)(1). The energy control procedure must be "developed, documented and utilized" and must "clearly and specifically outline the scope, purpose, authorization, rules, and techniques to be utilized for the control of hazardous energy, and the means to enforce compliance." 29 C.F.R. § 1910.147(c)(4)(i), (c)(4)(ii). Additionally, the LOTO standard prescribes a specific sequence for the application of energy controls to incorporate into each procedure. 29 C.F.R. § 1910.147(d). The standard further requires employers to conduct an annual periodic inspection of the energy control procedure "to ensure that the procedure and the requirements of this standard are being followed." 29 C.F.R. § 1910.147(c)(6).

In addition, the LOTO standard mandates both initial training and retraining in lockout procedures for servicing employees, and other employees who work near machines that are being serviced. 29 C.F.R. § 1910.147(c)(7)(i), (c)(7)(iii). Specifically, the standard requires initial lockout training to "ensure that the purpose and function of the energy control program are understood by employees and that the knowledge and skills required for the safe application, usage, and removal of the energy controls are acquired by employees." 29 C.F.R. § 1910.147(c)(7)(i). Retraining must be provided for servicing employees when "there is a change in their job assignments, a change in machines, equipment or processes that present a new hazard, or when there is a change in the energy control procedures." 29 C.F.R. § 1910.147(c)(7)(iii)(A). Additionally, the employer must provide retraining "whenever the employer has reason to believe[] that there are deviations from or inadequacies in the employee's knowledge or use of the energy control procedures." 29 C.F.R. § 1910.147(c)(7)(iii)(B). The employer must also certify "employee training has been accomplished and is being kept up to date." 29 C.F.R. § 1910.147(c)(7)(iv).

V. CITATION ITEMS—MERITS

A. WILLFUL CITATION 1, ITEMS 1a, 1b, and 1c – ENERGY CONTROL PROGRAM AND PROCEDURES

Under this grouped citation item, the Secretary alleges that GM violated three separate provisions of the LOTO standard by failing to (1) have a compliant energy control program; (2) utilize proper energy control procedures; and (3) articulate its energy control procedures with adequate specificity. The judge found GM in violation of each of the three cited provisions and affirmed this item. For the following reasons, this grouped item is affirmed.

PRINCIPLES OF LAW

The LOTO standard mandates that an employer "shall establish a program consisting of energy control procedures, employee training and periodic inspections to ensure" that machines are deenergized and locked out before an employee performs covered servicing or maintenance. 29 C.F.R. § 1910.147(c)(1). The energy control procedures "shall be developed, documented and utilized for the control of potentially hazardous energy when employees are engaged in" covered activities. 29 C.F.R. § 1910.147(c)(4)(i). These procedures "shall clearly and specifically outline the scope, purpose, authorization, rules, and techniques to be utilized for the control of hazardous energy, and the means to enforce compliance." 29 C.F.R. § 1910.147(c)(4)(ii). Additionally, procedures must include "specific" statements of the intended use of the procedure, procedural steps for performing both shutdown and lockout, and requirements for testing and verifying lockout. 29 C.F.R. § 1910.147(c)(4)(ii)(A)-(D).

ANALYSIS

1. Item 1a—29 C.F.R. § 1910.147(c)(1) (energy control program)

Under this sub-item, the Secretary alleges that GM lacked a program containing sufficient energy control procedures and employee training to ensure effective use of LOTO "in accordance with [the provision specifying energy control procedures]." As a threshold matter, we reject GM's argument—raised for the first time on review—that this sub-item should be vacated because it is duplicative of sub-items 1b and 1c, which allege deficiencies pertaining to the effective implementation of GM's energy control program. Violations are duplicative "where the standards cited require the same abatement measures, or where abatement of one citation item will necessarily result in the abatement of the other item as well." *Rawson Contractors, Inc.*, 20 BNA OSHC 1078, 1082 n.5, 2002-04 CCH OSHD ¶ 32,657, p. 51,328 n.5

(No. 99-0018, 2003). The three provisions cited under this grouped citation item separately require the establishment of an energy control program as well as the implementation of prescribed components of that program. Thus, establishing a fully compliant energy control program would not abate a failure to implement the components of that program, nor would implementation of required energy control procedures abate a failure to establish a program. *See W.G. Fairfield Co.*, 19 BNA OSHC 1233, 1238 n.15, 2000 CCH OSHD ¶ 32,216, p. 48,867 n.15 (No. 99-0344, 2000) ("[T]he requirement to establish a program . . . [is] not duplicative of the requirement to train employees in the elements and implementation of that program, even though the program requirement may derive from the training requirement."), *aff'd*, 285 F.3d 499, 504 (6th Cir. 2002) (affirming both program and training violations, court noted that "[s]tated simply, one citation was for not making the proper policies, and the other was for not instructing employees on those policies").

With respect to the merits of this sub-item, the record shows that GM's energy control program was deficient. GM's plant safety and ergonomics manager, William Young, admitted that GM never established the periodic inspection component of its energy control program. Young "thought [the plant's] existing program was compliant, with one exception . . . [t]he need to conduct a periodic audit." According to Young, not only had the plant failed to conduct a periodic inspection "in the context of the provisions of the standard" by the time the accident occurred, but plant management was still "discussing the audit" and "reviewing" the standard's inspection provision at that time. Moreover, when asked to recite what elements formed the plant's energy control program, Young noted only the plant's written energy control procedures and the joint UAW-GM training manual—he made no mention of periodic inspections.

Based on this evidence, GM failed to establish a compliant energy control program as required under § 1910.147(c)(1). Accordingly, Item 1a is affirmed.

2. Item 1b—29 C.F.R. § 1910.147(c)(4)(i) (development, documentation and utilization of energy control procedures)

Under this sub-item, the Secretary alleges that GM failed to use required lockout procedures to deenergize "motor rail conveyors and other machinery," subjecting authorized

employees[5] to hazards caused by unexpected energization.[6] More than thirty GM employees testified at the hearing. Numerous employees testified that they performed servicing and/or maintenance during the limitations period without locking out. Some of these employees explained that they could not lock out because they were not given a safety lock until after the accident. Additionally, several testified they had been injured or could have been injured by unexpected energizations while performing servicing and/or maintenance without locking out. *Cf. Interstate Brands Corp.*, 20 BNA OSHC 1102, 1106, 2002 CCH OSHD ¶ 32,656, p. 51,321 (No. 00-1077, 2003) (rejecting allegation that employer failed to properly utilize LOTO where record lacked evidence about the type of work performed, whether equipment could unexpectedly energize and cause injury, and whether employee worked in danger zone).

Moreover, numerous employees testified that supervisors had observed them performing service and maintenance work on equipment without locking out. According to several employees, pressure from supervisors to avoid production delays discouraged employees from locking out.[7] As electrician Patrick Parker stated in a written statement to an OSHA investigator:

> To use the LOTO program would rock the boat and [employees] could lose a good position/job. Basically GM was aware of the hazards created by not having a LOTO program, but they made no effort to implement a good program because

[5] The LOTO standard defines an "[a]uthorized employee" as "[a] person who locks out or tags out machines or equipment in order to perform servicing or maintenance on that machine or equipment." 29 C.F.R. § 1910.147(b).

[6] In affirming this sub-item we do not rely on evidence pertaining to the motor rail conveyor accident, which is separately cited in Items 53-57 under the more specific standards that "'set[] forth the measures that . . . must [be] take[n] to protect employees from [the] *particular hazard.*'" *Brock v. L.R. Willson & Sons, Inc.*, 773 F.2d 1377, 1381 (D.C. Cir. 1985) (citation omitted); 29 C.F.R. § 1910.5(c)(1) ("If a particular standard is specifically applicable to a condition, . . . it shall prevail over any different general standard which might otherwise be applicable to the same condition . . . ."). Accordingly, the penalty amount for grouped Item 1a-c is adjusted to reflect the narrower evidentiary grounds on which this sub-item is affirmed. *Cf. Burkes Mech. Inc.*, 21 BNA OSHC at 2142 (assessing grouped penalty for interrelated LOTO citation items where both citations pertained to one single event—the failure to utilize LOTO for a single piece of equipment while employees cleaned debris from its underside).

[7] The record also contains numerous examples of a pervasive management effort at the plant to encourage employees to forego lockout in favor of production concerns. Although this evidence relates to incidents that occurred outside the limitations period, we consider these examples consistent with what occurred during that period, particularly because these efforts began before the LOTO standard's promulgation and continued thereafter, up until the hearing.

> it would delay production. . . . I don't think a LOTO program would delay production, however it[']s in the[ir] mind that it may – it[']s a corporate mentality; to take shortcuts and use whatever to get the production out. Production is king. Employees are always taking risks of one sort or another under pressure to get things done and shortcuts. Supervisors let this happen because they can always squeeze one more car out.

Another employee testified that this pressure from supervisors was "the only reason" he did not lock out.

Based on this evidence, GM failed to utilize energy control procedures in violation of § 1910.147(c)(4)(i). Accordingly, Item 1b is affirmed.

3. Item 1c—29 C.F.R. § 1910.147(c)(4)(ii) (specificity of energy control procedures)

Under this sub-item, the Secretary alleges that GM failed to "clearly and specifically" describe its energy control procedures and the means to enforce compliance. The record establishes that GM's lockout procedure is not only inadequate for its more complex equipment, but also lacks the specificity required by the standard.[8] The cited LOTO provision requires an employer to "clearly and specifically" outline the methods to be used in controlling hazardous energy, including "specific" statements of intent, procedural steps for shut down, procedural steps for locking out, and requirements for testing the effectiveness of the energy control measures used. 29 C.F.R. § 1910.147(c)(4)(ii). In the preamble to the LOTO standard final rule, OSHA rejected suggestions that it remove "specific" as a modifier, explaining its retention "to emphasize the need to have a detailed procedure, one which clearly and specifically outlines the steps to be followed." Lockout/Tagout I, 54 Fed. Reg. at 36,670. According to the preamble, "[o]vergeneralization can result in a document which has little or no utility to the employee who must follow the procedure." *Id.*

At the same time, the preamble provides that a single procedure "can apply to a group of similar machines, types of energy and tasks if [it] can address the hazards and the steps to be

[8] On review, GM appears to interpret the judge's decision as requiring the company to create machine-specific procedures. The judge, however, simply found some machines to be more complex than others, and determined that the energy control procedures for those machines must be specific enough to guide an authorized employee to effectively lock out. Because a need for machine-specific procedures was neither argued by the Secretary nor considered by the judge, we do not address GM's arguments concerning OSHA's pre-promulgation reliance on studies purportedly indicating that such procedures were not contemplated by the LOTO standard.

taken satisfactorily." *Id.* As GM acknowledges, the amount of detail required would depend on "the complexity of the equipment and the control measures to be utilized." *Id.*; *cf. Drexel Chem. Co.*, 17 BNA OSHC 1908, 1913, 1995-97 CCH OSHD ¶ 31,260, p. 43,876 (No. 94-1460, 1997) ("Because the standard requires the lockout procedures for each type of machine to be specifically defined, and because there are different types of machines at the plant, [respondent] must have more than one lockout procedure."). As the introduction to the standard's appendix—which contains a "typical minimum lockout procedure"—states: "For more complex systems, more comprehensive procedures may need to be developed, documented and utilized." 29 C.F.R. § 1910.147 app. A. Emphasizing this point, the Secretary's expert witness, OSHA safety specialist Richard Sauger, testified:

> If you have a very simple machine [with] a single energy source and the energy source is immediately available . . . so it can be identified as being the energy-isolating device for a machine, then your procedure can be very simple. However, the more complex the machine the more detail you would necessarily need so that the employee could gain the knowledge to be able to do the job safely; i.e., lock out the machine.

The purpose of the prescribed lockout procedure is "to guide an employee through the lockout process." *Drexel Chem. Co.*, 17 BNA OSHC at 1913, 1995-97 CCH OSHD at p. 43,876. The Commission has rejected an employer's incomplete "generic[]" energy control procedure—apparently "derive[d] from Appendix A to § 1910.147," finding that such "general procedures are not acceptable." *Id*. at 1913, 1995-97 CCH OSHD at pp. 43,875-76. Observing that the LOTO standard's appendix leaves blank spaces for the employer to fill in, the Commission noted in *Drexel* that the company had failed to fill in any of this information. *Id.* As a result, the Commission concluded that Drexel's procedures "fall far short of the standard's requirements. They provide no information about Drexel's machines that would enable an employee to lock out a machine safely." *Id.*

Here, GM's three-page lockout procedure briefly states that its purpose is to secure machinery and equipment undergoing servicing. It describes the lockout sequence generically as shutting down "by the normal stopping procedure," followed by isolation of identified types of energy sources and dissipation of any stored energy, and provides for restoration of energy "[w]hen the job is complete" after checking that "no one is exposed" and the "equipment is all clear." The most detailed discussion in GM's procedure concerns effective lockout verification,

which directs an employee to first "assur[e that] no personnel are exposed," and then "operate push button or other normal operating controls to make certain the equipment will not operate."

We agree with the judge that GM's procedure "lacks a number of the specifics set out in the sample [Appendix A to the standard] and required by the standard." Although this procedure contains slightly more information than the one at issue in *Drexel*, it similarly fails to inform the employee of the specific procedural steps to shut down and lock out a machine. GM's procedure also specifies some types of energy isolating devices, but provides no additional information on GM's "machines that would enable an employee to lock out a machine safely." *Id.* at 1913, 1995-97 CCH OSHD at p. 43,876. Finally, like the energy control procedure at issue in *Drexel*, GM's procedure fails to fill in the blanks from the standard's appendix, such as the "Type of compliance enforcement to be taken" and the "Name(s)/Job Title(s) of affected employees and how to notify." 29 C.F.R. § 1910.147 app. A; 17 BNA OSHC at 1913, 1995-97 CCH OSHD at p. 43,876.

We also conclude that GM's procedure was inadequate with respect to the plant's more complex equipment. GM staff engineer Richard Parry testified that the "energy sources and their magnitudes are universal throughout the whole plant" and the energy-isolating devices on the plant's machines "are universally the same type of unit" and are "all readily and easily identifiable." Using the plant's written procedure, Parry asserted, an authorized employee could control the energy sources to every machine in the plant. The record shows, however, that the plant contained very complex machines, including the motor rail conveyor—the machine on which the accident occurred—which contained "15 or 16 automatics, 165 weld guns, probably 300 limit switches [and] over 150 disconnects," and for which at least four safety locks were necessary to lock it out. Indeed, although GM engineer Parry may have been able to lock out the conveyor applying GM's procedure, the decedent—a journeyman millwright with ten years of experience—was so concerned about his unfamiliarity with the conveyor that he told his supervisor he feared "get[ing] [his] damned head caught in that thing." Based on this evidence, GM's bare-bones procedure was inadequate to effectively guide its servicing and maintenance employees through the process of fully deenergizing and locking out this complex equipment.

In these circumstances, GM's energy control procedure was both too general to satisfy the specificity requirement of § 1910.147(c)(4)(ii) and inadequate for employees required to service complex machinery such as the motor rail conveyor. Accordingly, Item 1c is affirmed.

B. WILLFUL CITATION 1, ITEM 2 – PERIODIC INSPECTION

Under this item, the Secretary alleges GM failed to conduct an annual periodic inspection of the energy control procedure within one year of the LOTO standard's effective date. In affirming the violation, the judge relied on the admission of plant safety and ergonomics manager Young that GM had failed to conduct the required inspection by the time OSHA arrived at the worksite. On review, GM claims that Young's testimony—that he "thought [GM's] existing program was compliant, with one exception . . . [t]he need to conduct a periodic audit"—does not amount to an admission of wrong-doing, and that GM was "unsure" of what the LOTO standard's inspection provision required, including when the first inspection had to be conducted. For the following reasons, this item is affirmed.

PRINCIPLES OF LAW

The LOTO standard mandates that an employer perform a "periodic inspection" of the prescribed energy control procedure "at least annually." 29 C.F.R. § 1910.147(c)(6)(i).[9] Given that the LOTO standard became effective on January 2, 1990, an employer subject to the standard's requirements was required to conduct an annual inspection of its energy control procedure within one year of that date. Lockout/Tagout II, 54 Fed. Reg. at 46,610; OSHA Instruction STD 1-7.3—*29 CFR 1910.147, the Control of Hazardous Energy (Lockout/Tagout)—Inspection Procedures and Interpretive Guidance* pt. D. (Sept. 11, 1990) ("OSHA Instruction STD 1-7.3").

[9] Section 1910.147(c)(6)(i) provides:

> (6) *Periodic inspection.* (i) The employer shall conduct a periodic inspection of the energy control procedure at least annually to ensure that the procedure and the requirements of this standard are being followed.
>
> (A) The periodic inspection shall be performed by an authorized employee other than the ones(s) utilizing the energy control procedure being inspected.
>
> (B) The periodic inspection shall be conducted to correct any deviations or inadequacies identified.
>
> (C) Where lockout is used for energy control, the periodic inspection shall include a review, between the inspector and each authorized employee, of that employee's responsibilities under the energy control procedure being inspected.
>
> (D) Where tagout is used for energy control, the periodic inspection shall include a review, between the inspector and each authorized and affected employee, of that employee's responsibilities under the energy control procedure being inspected, and the elements set forth in paragraph (c)(7)(ii) of this section.

ANALYSIS

As discussed above with respect to the program violation (Item 1a), Young confirmed that GM had failed to conduct the required inspection of its energy control procedure as of the April 4, 1991 accident—more than one year after the standard's effective date. As GM acknowledges, Young explained that "[w]e had not conducted an audit in the context of the provisions of the standard." Indeed, GM admitted before the judge that "[i]t is not disputed that annual inspections were required, but [that it] did not know when the first one was required to occur." According to Young, GM was "confus[ed]" in interpreting the standard and, at the time of the accident, was "discussing the audit," including when it would have to be completed.

However, based upon the standard, its preamble, and the LOTO compliance directive, GM was required not only to establish a compliant energy control procedure at the time of the January 2, 1990 effectuation of the standard, but to conduct its first annual inspection of that procedure within one year. *See Manganas Painting Co.*, 21 BNA OSHC 1964, 1990, 2007 CCH OSHD ¶ 32,908, p. 53,405 (No. 94-0588, 2007) (finding employer's compliance with newly-promulgated standard required "upon effectuation and pursuant to [any] applicable startup dates"). Therefore, GM's asserted confusion "would not be relevant to whether a violation is established" where, as here, the law setting forth the requirement is plain. *Froedtert Mem'l Lutheran Hosp., Inc.*, 20 BNA OSHC 1500, 1509, 1999 CCH OSHD ¶ 31,865, p. 47,029 (No. 97-1839, 2004) (holding an employer's misunderstanding of law irrelevant to whether a violation has been established where statute "plainly states" its applicability).[10]

In addition, GM's argument that the periodic inspection provision created confusion due to a lack of "objective criteria" is meritless. The standard expressly requires an employer to

[10] Although the evidence with respect to Item 2 is similar to that which we rely upon to support affirming the program violation under Item 1a, we do not find these two citation items to be duplicative. For Item 1a, abatement consists of *establishing* an energy control program that contains a periodic inspection element. 29 C.F.R. § 1910.147(c)(1). For Item 2, abatement consists of *implementing* the periodic inspection element of the program. In this case, GM neither established nor implemented a periodic inspection of its energy control procedures. *See W.G. Fairfield Co.*, 19 BNA OSHC at 1238 n.15, 2000 CCH OSHD at p. 48,867 n.15 (finding "the requirement to establish a program . . . not duplicative of the requirement to train employees in the elements and implementation of that program, even though the program requirement may derive from the training requirement"), *aff'd*, 285 F.3d at 504 (affirming both program and training violations, court noted that, "[s]tated simply, one citation was for not making the proper policies, and the other was for not instructing employees on those policies").

conduct periodic inspections "to correct any deviations or inadequacies" in the employer's energy control procedure and prescribes a review of lockout procedures with "each authorized employee." 29 C.F.R. § 1910.147(c)(6)(i)(B)-(C). Additionally, the preamble identifies the bases on which the adequacy of the procedure must be evaluated—i.e., "whether the steps in the energy control procedure are being followed; . . . whether the employees involved know their responsibilities under the procedure; and . . . whether the procedure is adequate to provide the necessary protection, and what changes, if any, are needed." Lockout/Tagout I, 54 Fed. Reg. at 36,673. *See Am. Sterilizer Co.*, 15 BNA OSHC 1476, 1478, 1991-93 CCH OSHD ¶ 29,575, pp. 40,015-16 (No. 86-1179, 1992) (noting preamble is "best and most authoritative statement of the Secretary's legislative intent" for standard susceptible to different interpretations). OSHA's LOTO compliance directive further specifies that the "[periodic] inspections shall at least provide for a demonstration of the procedures and may be implemented through random audits and planned visual observations." OSHA Instruction STD 1-7.3 pt. I.5.a. This directive explains that "[periodic] inspections are intended to ensure that the energy control procedures are being properly implemented and to provide an essential check on the continued utilization of the procedures . . . ." *Id.* Thus, the LOTO standard fully identifies its objectives and provides an employer with the opportunity to comply with this provision in any manner that corrects the deficiencies and inadequacies found either in an employee's knowledge or in the energy control procedures. 29 C.F.R. § 1910.147(c)(6)(i)(B).

In these circumstances, the Secretary has established that GM violated the periodic inspection provision. Accordingly, Citation 1, Item 2 is affirmed.

C. WILLFUL CITATION 1, ITEMS 3-7, 11, 14-16, 18, 19, 21-29, 44, 50 – INITIAL TRAINING

Under these items, the Secretary alleges on a per-employee basis that GM failed to provide required initial lockout training prescribed by § 1910.147(c)(7)(i) to twenty-two authorized and affected employees. The judge affirmed all of the citation items on review, finding that each employee received no lockout training, insufficient lockout training, or inadequate lockout training.[11] On review, GM contends the Secretary failed to establish it did

[11] We note that an employee's failure to perform lockout does not necessarily indicate that the employee was not initially trained in LOTO. *See N & N Contractors, Inc.*, 18 BNA OSHC 2121, 2127, 2000 CCH OSHD ¶ 32,101, p. 48,244 (No. 96-0606, 2000) (distinguishing between employee "*practices*" and training, Commission vacated alleged fall protection training violation

not provide adequate lockout training to these employees. It argues that an employee's failure to recall training does not show the training did not occur, and that lockout training contained in equipment-specific courses satisfied the general LOTO training requirement. For the following reasons, we affirm Items 3, 4, 7, 14, 16, and 44, and vacate Items 5, 6, 11, 15, 18, 19, 21-29, and 50.

PRINCIPLES OF LAW

The LOTO standard mandates that an employer "shall provide training to ensure that the purpose and function of the energy control program are understood by employees and that the knowledge and skills required for the safe application, usage, and removal of the energy controls are acquired by employees." 29 C.F.R. § 1910.147(c)(7)(i). The initial training provision also specifies the necessary lockout training for authorized, affected, and all other employees.[12] 29 C.F.R. § 1910.147(c)(7)(i)(A)-(C). Each authorized employee must receive training "in the recognition of applicable hazardous energy sources, the type and magnitude of the energy available in the workplace, and the methods and means necessary for energy isolation and control" and each affected employee must receive training "in the purpose and use of the energy control procedure." 29 C.F.R. § 1910.147(c)(7)(i)(A)-(B). To establish a violation, the Secretary must show by a preponderance of the evidence that: "(1) the standard applies, (2) the employer violated the terms of the standard, (3) its employees had access to the violative condition, and (4) the employer had actual or constructive knowledge of the violative condition."

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despite employee non-compliance with fall protection rules), *aff'd per curiam*, 255 F.3d 122 (4th Cir. 2001). Therefore, unlike the judge, we do not rely herein on any employee's failure to utilize LOTO as evidence of a failure to provide LOTO training.

[12] The LOTO standard defines the two types of employees as follows:

> *Affected employee.* An employee whose job requires him/her to operate or use a machine or equipment on which servicing or maintenance is being performed under lockout or tagout, or whose job requires him/her to work in an area in which such servicing or maintenance is being performed.
>
> *Authorized employee.* A person who locks out or tags out machines or equipment in order to perform servicing or maintenance on that machine or equipment. An affected employee becomes an authorized employee when that employee's duties include performing servicing or maintenance covered under this section.

29 C.F.R. § 1910.147(b).

Fluor Daniel, 19 BNA OSHC 1529, 1530, 2001 CCH OSHD ¶ 32,443, p. 50,044 (No. 96-1729, 2001) (consolidated) (citations omitted), *aff'd*, 295 F.3d 1232 (11th Cir. 2002).

As a general matter, the substantive requirements of the LOTO standard apply "where the Secretary shows that unexpected energizing, start-up or release of stored energy could occur …." *Gen. Motors Corp., Delco Chassis Div.*, 17 BNA OSHC 1217, 1219, 1993-95 CCH OSHD ¶ 30,793, p. 42,809 (No. 91-2973, 1995) (consolidated), *aff'd*, 89 F.3d at 313; 29 C.F.R. § 1910.147(a)(1)(i). The Secretary establishes the "access" element of establishing a violation under this standard where the evidence shows it is reasonably predictable that an employee engaged in servicing or maintenance will be exposed to the hazard of unexpected energization. *Fabricated Metal Prod. Inc.*, 18 BNA OSHC 1072, 1074, 1995-97 CCH OSHD ¶ 31,463, pp. 44,506-07 (No. 93-1853, 1997) (holding exposure established where "reasonably predictable" employee will be in danger zone). However, with regard to training, it would be unreasonable to require that an employee be exposed to a hazard before requiring that he be trained to recognize and avoid that hazard. Accordingly, where an employee's job assignment includes equipment servicing or maintenance, and it is reasonably predictable that the employee will encounter the hazard of unexpected energization while performing such work, we conclude the requirements of the LOTO standard apply and training is required.

ANALYSIS

To determine applicability of the standard's initial training requirements in this case, we evaluate below the evidence of each citation item individually, examining whether the record establishes that each employee was assigned to perform servicing or maintenance during the limitations period on equipment at the GM plant which poses the hazard of unexpected energization.[13] Where the evidence establishes these elements, we conclude that the servicing and maintenance performed by these employees on this machinery makes it reasonably

[13] Where, as here, the evidence shows switches and buttons used to operate energized equipment undergoing servicing and maintenance could be accessed by any passerby to reactivate a shut down machine, the Secretary has established that the energization of such equipment would be unexpected. *Burkes Mech., Inc.*, 21 BNA OSHC at 2139 n.4. GM has failed to rebut this conclusion here, as it introduced no evidence showing that reactivation of the plant's equipment under these circumstances would not be immediate or would provide a warning that would make it expected. *Id.* (distinguishing *Gen. Motors Corp., Delco Chassis Div.*, 89 F.3d at 313).

predictable they would be exposed to the hazard of unexpected energization during the course of their duties, such that the applicability of the standard to these employees is established.

We also find that with respect to those citation items we affirm, the Secretary established GM "either knew of the [training violations] or could have known with the exercise of reasonable diligence." *Armstrong Steel Erectors, Inc.*, 17 BNA OSHC 1385, 1386, 1995-97 CCH OSHD ¶ 30,909, p. 43,040 (No. 92-262, 1995); *see also N & N Contractors, Inc.*, 18 BNA OSHC at 2123, 2000 CCH OSHD at p. 48,239 ("actual or constructive knowledge of a foreman or supervisor can be imputed to the employer"). In assessing reasonable diligence, the Commission has considered "several factors, including the employer's obligation to have adequate work rules and training programs, to adequately supervise employees, to anticipate hazards to which employees may be exposed, and to take measures to prevent the occurrence of violations." *Precision Concrete Constr.*, 19 BNA OSHC 1404, 1407, 2001 CCH OSHD ¶ 32,331, p. 49,552 (No. 99-0707, 2001).

GM safety supervisor Jerrie Wallace testified that, prior to the accident, GM periodically asked its employee-trainers about the "status o[f] the lock-out training" on an "informal" basis. She said the most recent training status check prior to May 1991 occurred "probably a few months" earlier. Wallace also testified that GM safety supervisors would "rely . . . totally [on the employee-trainers] to maintain our records and to let us know when there [are] training deficiencies." According to Wallace, it was her "understanding" from those inquiries that one hundred percent of GM employees had been trained in LOTO. Plant management, however, never requested documentation of training attendance at the 1985-86 joint UAW-GM lockout training course from the employee-trainers until after the accident. Moreover, Wallace acknowledged that the attendance roster she created after the accident to document those employees who lacked training may contain numerous errors. In fact, plant safety and ergonomics manager Young reviewed Wallace's roster and concluded that "much of it is inaccurate."

Based on this evidence, we conclude that GM failed to adequately assess its employee training needs. Specifically, the company relied on records kept by its employee-trainers that management never monitored and for which managers requested no documentation until after the accident. Although the practice of having employee-trainers maintain training records originated before the standard's promulgation, the record shows it continued until the time of the accident.

In these circumstances, GM's failure to confirm the training status of its employees by means other than "informal" and "periodic" conversations with the employee-trainers demonstrates a lack of diligence regarding its training obligation under the standard. Accordingly, we find GM had constructive knowledge of any failures to provide required LOTO training to the employees at issue. *Cf. Froedtert*, 20 BNA OSHC at 1508-09, 1999 CCH OSHD at pp. 47,028-29 (finding failure to effectively delegate training obligation where employer never confirmed that training was provided).

We turn now to the individual citation items alleged under the initial LOTO training provisions.

1. Authorized employees: Items 3-7, 11, 14-16, 18, 19, 21-23, 44, 50

Under these items, the Secretary alleges that GM failed to provide lockout training to sixteen authorized employees under 29 C.F.R. § 1910.147(c)(7)(i)(A). Based on our review of the record, which includes the testimony of all sixteen employees, we find the Secretary established that GM failed to provide initial lockout training to six of these sixteen authorized employees. Accordingly, as discussed in detail below, we affirm Items 3, 4, 7, 14, 16, and 44, and vacate Items 5, 6, 11, 15, 18, 19, 21-23, and 50.

a. Affirmed Items

Item 3 – Millwright Alton Tucker worked in his position since 1985 and, at the time of the accident, serviced and maintained "[a]ny mechanical machine" that might have electrical, pneumatic, or hydraulic energy sources. Tucker also performed servicing on the motor rail conveyor on a regular basis. He did not recall receiving "any type" of lockout training prior to the accident, or ever seeing the two joint UAW-GM lockout training manuals entered into evidence.[14] Tucker acknowledged having eight hours of robotics training in April 1990, sixteen

[14] Many authorized employees testified on direct examination they did not recall receiving any lockout training from GM before the accident. GM argues that an employee could have "received the required training and still not remember any such session," because two employees who testified they had not been trained later recanted. The joint UAW-GM lockout training course was eight-hours long and accompanied by a 111-page training manual. In our view, an employee's failure to remember such detailed, intensive training would establish, *prima facie*, that the employee did not attend that training course, which GM could then rebut with evidence of the employee's attendance. Any such rebuttal evidence is addressed where pertinent to an individual citation item.

hours of laser training in October 1990, and eight hours of forklift training in December 1990.[15] However, when asked specifically whether he was "ever trained by General Motors on how to determine if hazardous energy has been controlled prior to the time of Don Smith's accident[,]" Tucker replied: "No, ma'am. When you hire in at General Motors, you are supposed to have enough background in that field to know that yourself."

Based on this evidence showing Tucker's job assignment included servicing and maintenance on all types of equipment during the period covered by the citation, we find the Secretary established that any lockout training Tucker received during other safety training courses was insufficient under the standard. Accordingly, we affirm this citation item.

Item 4 – Millwright Steven Greenwood worked in the body shop where he serviced and maintained equipment in the motor rail area at the time of the accident. Greenwood completed his apprenticeship before being hired by GM as a journeyman millwright, and acknowledged he felt proficient in lockout at the time he was hired. Nonetheless, Greenwood could not recall receiving "any formal lockout training before the accident," but did recall "being issued a safety lock, and [attending] . . . safety meetings, but never . . . an eight-hour or a five-day lock-out training, or what [he] would consider formal training . . . ." He "guess[ed] they pretty much took for granted that you knew what a safety lock was for."

Greenwood described the safety meetings he attended prior to the accident as lasting fifteen or twenty minutes and "probably" including some lockout information "at times[,]" but did not recall being shown how to lock out a specific piece of equipment. He also indicated his robotics training contained "[q]uite a bit of lock-out" and described it as "all types of basic robotic safety, including the proper way to lock one out . . . [but] pretty much [specific only to the robots]." Based on this evidence showing Greenwood's job assignment included servicing

[15] Like Tucker, some employees who did not recall having general lockout training testified that they received some form of lockout training as part of robotics, forklift, and/or laser training courses. The little record evidence concerning the content of any of this training, however, suggests that it principally pertained to the particular type of equipment—robotics, forklifts, or lasers—being addressed. Indeed, the judge explicitly found that the robotics training "addressed lockout only as to robots." Therefore, in the absence of any rebuttal evidence from GM as to the lockout instruction provided in these other training courses, we find an employee's participation in such training would not satisfy the requirements of the cited standard for those employees who worked on equipment other than robots, forklifts, or lasers.

and maintenance on all types of equipment during the period covered by the citation, we find the Secretary established that any lockout training Greenwood received during other safety training courses was insufficient under the standard. Accordingly, we affirm this citation item.

Item 7 – Journeyman toolmaker Robert B. Peliti worked in "the shop" at the time of the accident, where he re-made and repaired parts, and worked on "the floor"—including the motor rail area—at least two or three times a week repairing machines. Prior to the accident, Peliti did not receive any training on the joint UAW-GM lockout training manual, but did attend eight-hour courses in forklifts, lasers, and robotics in 1988 and 1990. Based on this evidence showing Peliti's job assignment included servicing and maintenance on all types of equipment during the period covered by the citation, we find the Secretary established that any lockout training Peliti received during equipment-specific training courses was insufficient under the standard. Accordingly, we affirm this citation item.

Item 14 – Equipment cleaner Anthony Jackson worked in the paint shop on the maintenance shift at the time of the accident. His work entailed changing the floor grates, spraying acid on machinery, and wiping down the equipment, including the paint sprayers. According to Jackson, he did not utilize lockout while doing this work prior to the accident, but is now required to do so. Jackson also recalled an incident involving equipment that should have been "turned off" but moved when he bumped up against it, and "probably could have broke[n] [his] jaw" had he not jumped back. Jackson testified unequivocally he had not received any lockout training "during [his] entire employment" at the plant prior to the accident. Despite counsel's assertion that GM records not introduced into evidence would establish Jackson's attendance at a November 17, 1982 lockout training session described as "not . . . the eight-hour GM/UAW course, but . . . some training," Jackson did not remember receiving such training.

We find this evidence sufficient to establish Jackson was an authorized employee whose job assignment included servicing and maintenance on energized equipment during the period covered by the citation, and that GM failed to provide him required initial lockout training. 29 C.F.R. § 1910.147(b) (servicing and/or maintenance includes cleaning of machines). Accordingly, we affirm this citation item.

Item 16 – Millwright Gregory Keith Beam worked in the paint department on the maintenance shift during the limitations period. According to Beam, his work took him to other areas of the plant "[q]uite often [—] [t]wo or three times a week." Beam specifically mentioned

working in the motor rail area or body shop before the accident, and he generally described performing work for which lockout would have been required. Beam did not remember receiving any pre-accident lockout training, but he did receive both forklift and robotics training. Based on this evidence showing Beam's job assignment included servicing and maintenance on all types of equipment during the period covered by the citation, we find the Secretary established that any lockout training Beam received during other safety training courses was insufficient under the standard. Accordingly, we affirm this citation item.

Item 44 – Equipment cleaner Eunice Kennedy worked in the paint department at the time of the accident. Her duties included lifting grates and mopping, as well as wrapping plastic around an automatic floor-to-ceiling paint sprayer that spins when energized. Kennedy testified unequivocally that prior to the accident she had neither been instructed in lockout nor been issued a safety lock. According to Kennedy, prior to the accident she was only told "if the red light is on, don't go in," and stated that if an employee was in the machine when it would spin, "it would cut you up." GM introduced rebuttal evidence consisting of a signed statement Kennedy made to OSHA which states she received lockout training in the winter of 1990 in a four-hour course. Kennedy admitted she signed the statement believing it to be "true and accurate at the time," but also testified that the date on her signed statement was incorrect and reiterated she "received [her] lock-out training after the accident."

We find that Kennedy was an authorized employee, as her job assignment included servicing and maintenance of energized equipment during the period covered by the citation. 29 C.F.R. § 1910.147(b) (servicing and/or maintenance includes cleaning of machines). We also find Kennedy's unwavering assertion that she did not receive lockout training before the accident, coupled with her characterization of her signed statement as mistaken about the training date, sufficient to overcome GM's rebuttal evidence. Accordingly, we conclude the Secretary established GM failed to provide Kennedy with required initial lockout training, and affirm this citation item.

b. Vacated Items

Item 5 – Maintenance employee David A. Beauregard worked in the millwright's shop six months prior to the accident and continued in this position another six months to a year thereafter. According to his unrebutted testimony, he did not recall ever receiving lockout training. Nonetheless, Beauregard also testified that around the time of the accident, he worked

in "fabrication-type situations" that did not require him to work on or have access to any machines, and noted in a signed statement to OSHA that "lock out really do[es] not come into play on my job." In these circumstances, we find the Secretary failed to establish that Beauregard was an authorized employee during the period covered by the citation for whom GM should have provided initial lockout training. Accordingly, we vacate this item.

Item 6 – Electrician Harold Harteke worked in the paint department at the time of the accident, where his job assignment included regular servicing and maintenance of conveyors, ovens, and control equipment. Harteke initially testified that "the first time [he] had *any* lock-out training at . . . the Oklahoma City plant" was "[a]fter the accident." (Emphasis added.) Harteke also admitted, however, that "the issue of lock-out and safety was brought up" during his 1985 orientation, and prior to the accident he attended robotic training that covered robot-specific lockout. Based on the inconsistencies in Harteke's own testimony, we find it insufficient to establish GM failed to provide him required initial lockout training, and vacate this item.

Item 11 – Toolmaker Wallace R. Ellis worked the maintenance shift in the body shop at the time of the accident where he was "responsible for the upkeep of the fixtures, repairs, or modifications," which included changing pins, replacing worn parts, and welding. Although Ellis is listed on GM's roster of employees who did not attend the joint UAW-GM lockout training, he remembered attending some classes on lockout before the accident, as well as a predecessor joint UAW-GM lockout training included in his 1983 apprenticeship program. Ellis "believed" the apprenticeship program lockout training included information "on how to use a lock to lock out - - to isolate energy sources," but he did not "believe" he had received the lockout training booklet or procedure either at that time or prior to the accident. While Ellis also stated he had not been taught how to use his safety lock in the safety meetings he had attended, he was not asked about safety lock instruction in his apprenticeship lockout training. In addition, Ellis denied having heard the term "authorized person" in connection with lockout or deenergization, but appears to have received post-accident lockout training where that term would likely have been used. In these circumstances, we find the evidence insufficient to establish GM failed to provide Ellis required initial lockout training, and vacate this item.

Item 15 – Electrician William Winslett worked from 1985 until the time of the hearing in the body shop where he performed service and maintenance on equipment "[e]very night." Although listed on GM's roster of employees who did not receive the joint UAW-GM lockout

training course, Winslett recalled receiving instructions on safety and use of a safety lock during his orientation upon arrival at the plant, and attended safety meetings at which lockout was discussed. In the absence of evidence showing deficiencies in the orientation lockout training, we find the record insufficient to establish GM failed to provide Winslett required initial lockout training, and vacate this item.

Item 18 – Toolmaker Lloyd Steven Lester worked in the "shop" at the time of the accident, but his testimony establishes that his work did not principally include servicing or maintenance of equipment that could unexpectedly energize and, for those occasions when he might have worked under those conditions, there is no evidence whether such work occurred during the limitations period. Moreover, although Lester is listed on GM's roster of employees who did not attend the joint UAW-GM lockout training, he received some lockout training during his apprenticeship program in 1983. In these circumstances, we find the evidence insufficient to establish GM failed to provide Lester required initial lockout training, and vacate this item.

Item 19 – Electrician Ronnie Ray Wickware worked the maintenance shift performing service on machines throughout the limitations period without the use of lockout. With respect to training, the only question Wickware was asked at the hearing focused on whether he had attended a course in which he was provided the UAW-GM training manual. Although he acknowledged attending such a course after the accident, we find no evidence in the record establishing the referenced manual was handed out to each employee at each lockout training session. In these circumstances, the record lacks evidence as to whether he attended a training course, without the manual being distributed, prior to the accident. Accordingly, the record is insufficient to establish GM failed to provide Wickware required initial lockout training, and we vacate this item.

Item 21 – Electrician Merle Kopf worked with a "special projects crew" in the engineering department in the six months preceding the accident, and the Secretary acknowledges that he performed no machine servicing in that position. There is nothing in the record to show when Kopf's assignment ended and what other tasks, if any, he was assigned during the limitations period. In these circumstances, we find the evidence insufficient to establish GM failed to provide Kopf required initial lockout training, and vacate this item.

Item 22 – Toolmaker Larry C. Stapleton worked in the machine shop during the maintenance shift at the time of the accident—an assignment that did not include servicing machines. Although Stapleton serviced machines on other assignments in the "year before the accident[,]" the record does not show whether he did so during the limitations period. Accordingly, we find the evidence insufficient to establish GM failed to provide Stapleton required initial lockout training, and vacate this item.

Item 23 – Millwright Jerald Vollmer worked in the body shop at the time of the accident where his job assignment included machine repair and servicing of the motor rail conveyor. Vollmer remembered receiving "some training" in lockout before the accident that included "dumping the air and locking out the energy sources and all this kind of stuff for our own self-protection[,]" but did not recall whether the lockout training manual was used as part of that training. Although Vollmer characterized the lockout training he received after the accident as his having "since . . . been properly trained[,]" the record contains no evidence of any particular deficiencies in the training GM provided to him prior to the accident. In these circumstances, we find the evidence insufficient to establish GM failed to provide Vollmer required initial lockout training, and vacate this item.

Item 50 – Toolmaker Bobby Gates worked on the maintenance shift and "frequently" worked overtime in the machine shop around the time of the accident. During that time, his primary responsibility was running machines and building parts. Although Gates testified that he did not receive full lockout training until after the accident, there is no evidence his job assignment included servicing and maintenance during the limitations period. In these circumstances, we find the evidence insufficient to establish GM failed to provide Gates required initial lockout training, and vacate this item.

2. Affected employees: Items 24-29

Under these items, the Secretary alleges that GM failed to provide "affected employee" training to six GM supervisors under section 29 C.F.R. § 1910.147(c)(7)(i)(B). None of the supervisors testified and, although the judge found the evidence regarding whether they had received lockout training "equivocal," he affirmed the items based on testimony that five of the supervisors tolerated employee failures to properly apply lockout. Based on our review of the

record, we find the Secretary did not establish that GM failed to provide these supervisors with the requisite lockout training, and vacate all six items.[16]

GM does not dispute that at least some of these six employees did not fully participate in the UAW-GM lockout training course, and we agree that the standard does not require such detailed training for affected employees. OSHA acknowledges that the training for affected employees is "less stringent" than for authorized employees "simply because affected employees do not perform servicing or maintenance operations." Lockout/Tagout I, 54 Fed. Reg. at 36,674. Indeed, the Secretary's expert witness, safety specialist Richard Sauger, testified that affected employees "simply have to be trained . . . that there is an energy-control program, and what their role is in [the] energy-control program." Sauger explained that an affected employee's "role in the program would be that if a machine or piece of equipment was being serviced . . . and they knew it . . . essentially it means, Just keep your hand off of it. Don't attempt to start it. Don't attempt to energize it."

According to Young, GM's plant safety and ergonomics manager, all six supervisory employees had been trained in safety and health matters, including deenergization and lockout, before the accident. Young specifically noted that maintenance supervisor Thomas Hendley (Item 24) had been trained in lockout, superintendent Chuck Lingeman (Item 26) had been through the joint UAW-GM lockout training course at another GM plant, general maintenance supervisor Eugene Beed (Item 28) had been trained in 1979, and plant engineer Turner Wilcox (Item 29) had been through four of the eight hours of the joint UAW-GM lockout training course. Based on this unrebutted testimony that all six supervisors received the lockout training required for affected employees, coupled with the Secretary's failure to address these items on review, we find the Secretary did not establish that GM failed to provide required lockout training to the six affected employees, and vacate these items.

[16] As noted above, we do not rely on a failure to use or enforce lockout as evidence of a failure to provide lockout training. *N & N Contractors*, 18 BNA OSHC at 2127-28, 2000 CCH OSHD at p. 48,244 (concluding that a "failure to enforce compliance with work rules on the job does not establish a failure to train or instruct").

D. WILLFUL CITATION 1, ITEMS 12, 20, 30-32, 34, 36-38, 40-43, 46-49, 51, 52 – RETRAINING

Under these items, the Secretary alleges on a per-employee basis that GM failed to provide required lockout retraining prescribed by § 1910.147(c)(7)(iii) to nineteen authorized employees. The judge affirmed all of these citation items, finding that each employee required, but did not receive, lockout retraining. For the following reasons, we affirm Items 12, 20, 32, 36-38, 40, 41, 46-49, and 51, and vacate Items 30, 31, 34, 42, 43, and 52.

PRINCIPLES OF LAW

The LOTO standard contains two retraining provisions with distinct triggers. Under the first provision, the requirement to retrain an employee is triggered by a change in the employee's job assignment, the hazards to which the employee is exposed, or the energy control procedures to be used. 29 C.F.R. § 1910.147(c)(7)(iii)(A). The preamble specifies that a change in job assignment only triggers retraining when the new assignment is one "for which they were not previously trained in lockout/tagout requirements." Lockout/Tagout I, 54 Fed. Reg. at 36,674, *amended by* Control of Hazardous Energy Sources (Lockout/Tagout): Final Rule; Corrections and Technical Amendments ("Lockout/Tagout III"), 55 Fed. Reg. 38,677, 38,682 (Sept. 20, 1990). The need to retrain may also be triggered by a new hazard to which an employee comes in contact. 29 C.F.R. § 1910.147(c)(7)(iii)(A). Under the second provision, the requirement to retrain an employee is triggered "whenever the employer has reason to believe[] that there are deviations from or inadequacies in the employee's knowledge or use of the energy control procedures." 29 C.F.R. § 1910.147(c)(7)(iii)(B). Thus, retraining is required when "an employee failed to operate within the guidelines of the control procedure." Lockout/Tagout I, 54 Fed. Reg. at 36,675.

ANALYSIS

1. Items 30-32, 34 (changed circumstances)

Under these items, the Secretary alleges that GM failed to provide retraining for four employees in violation of § 1910.147(c)(7)(iii)(A). The judge affirmed all four citation items based on his finding that each employee was "exposed to hazards contemplated by the standard after January 1990," worked on "unfamiliar equipment," and was not retrained. Contrary to GM's assertion, we do not read the judge's decision as imposing a requirement for machine-specific training. As the Secretary states on review, "[t]he gravamen of the . . . retraining

violations was not that the content was over-general but that the [re]training did not occur." For the following reasons, we affirm Item 32, and vacate Items 30, 31, and 34.

Item 30 – Millwright Patrick Liberty received lockout training in 1986 or 1987, but did not receive specific training on the equipment in the trim and chassis department when he was transferred there some time prior to the accident. There is no evidence, however, concerning Liberty's previous job assignments, and how the equipment in the trim and chassis department might have differed from that with which he had previously worked in terms of the use of lockout procedures. Although Liberty had been assigned to work on unfamiliar equipment out of his "usual area" in the year before the accident, there is no evidence this occurred during the limitations period or how that equipment differed from his usual assignments. In these circumstances, we find the evidence insufficient to establish retraining was required under the cited provision, and vacate this item.

Item 31 – Electrician Ronald Jordan performed service and maintenance in the body shop on the maintenance shift at the time of the accident, and in other areas of the plant, as needed. In the year before the accident, Jordan worked on unfamiliar equipment when temporarily assigned to fill in outside his regular work area, but prior to the accident he never performed service or maintenance on equipment where the energy control procedure had changed from the last time he had worked on it. Jordan also testified that he knew how to isolate energy sources, but noted, if he was new to an area, he might not know how to deenergize a machine and would find someone who did. Thus, the evidence shows that neither Jordan's job—which included filling in for absent employees in many areas of the plant—nor the hazards he faced, changed during the period covered by the citation. In these circumstances, we find the evidence insufficient to establish retraining was required under the cited provision, and vacate this item.

Item 32 – Millwright Donald Smith had apparently been assigned to work in the motor rail conveyor area for the first time only several days before his fatal accident in 1991. Millwright Steven Greenwood, Smith's predecessor in the motor rail area, testified that during his first six weeks working in that area he partnered with and depended upon another, more experienced millwright. Electrician Ronnie Wickware testified that "if you move into another area, you don't know where the electrical sources are to turn off, for air or whatever you are working on, to take it to a zero energy level." Nonetheless, according to plant safety and ergonomics manager Young, GM did not assign another millwright to show Smith around the

motor rail area, an area containing equipment the judge characterized as "not only complicated[,] but also hazardous for employees unfamiliar with it."

Apparently recognizing his own limitations, Smith sought help on the day of the accident, telling supervisor Jim Brown he "didn't want to get [his] damned head caught in" the motor rail conveyor. After Brown rebuffed his concerns, Smith enlisted electrician Patrick Parker's help to deenergize the conveyor, telling him he "didn't know a damn thing about this machine." Based on this evidence, we find GM knowingly reassigned Smith to service unfamiliar and complex equipment for which he lacked adequate relevant training. Accordingly, we conclude Smith's reassignment to the motor rail area necessitated retraining under the cited provision of the standard, and affirm this item.

Item 34 – Relief electrician Nicholas Mance, Jr. had maintenance responsibilities "all over the plant" at the time of the accident and worked on equipment with multiple power sources including machines in the motor rail area. When he was first hired at GM in 1978, Mance worked for a short time in the body shop where the motor rail equipment was located, then returned to that area sometime later. Although it appears his return to the body shop occurred in 1990, Mance testified that he worked on the motor rail conveyor in 1985. Although Mance was not shown how to lock out all of the energy sources on the newly-installed motor rail equipment in the body shop upon his return, the record is unclear as to whether he was newly assigned to unfamiliar and more complex equipment after the standard's January 2, 1990 effective date. In these circumstances, we find the evidence insufficient to establish retraining was required under the cited provision, and vacate this item.

2. Items 12, 20, 36-38, 40-43, 46-49, 51, 52 (inadequate employee knowledge or use of energy control procedures)[17]

Under these items, the Secretary alleges that GM failed to provide retraining for fifteen employees in violation of § 1910.147(c)(7)(iii)(B). The judge affirmed all of these items based on his finding that GM failed to provide retraining after supervisors had observed the employees servicing equipment without locking out. GM argues that these items should be vacated because they are based on activities that occurred prior to the standard's January 2, 1990 effective date

[17] For Items 12 and 20, the judge granted the Secretary's motions to amend alleged initial training violations to those that allege violations of the retraining provision.

and outside the section 9(c) limitations period. For the reasons that follow, we affirm Items 12, 20, 36-38, 40, 41, 46-49, and 51, and vacate Items 42, 43, and 52.

GM does not dispute the judge's finding that it failed to retrain each of the employees at issue in these items. In addition, given the circumstances for which retraining is required under the cited provision, we find a lack of retraining can properly be inferred from the record evidence establishing that GM managerial and supervisory personnel widely tolerated noncompliance with required lockout procedures, failed to enforce the use of lockout during servicing and maintenance, and even actively discouraged employees from employing required lockout protections during covered activities at the GM plant. With respect to the standard's applicability and statutory timeliness, we have evaluated the evidence of each item individually, examining whether the record establishes each employee performed servicing or maintenance after the effective date of the standard without using LOTO, and continued working in a position that included equipment servicing and maintenance during the limitations period in the absence of required retraining. For the items we affirm, we find that the evidence establishes these elements.

Where the record lacks evidence that GM had actual knowledge of a particular employee's failure to utilize LOTO triggering a need to retrain, we find that GM had constructive knowledge of its retraining obligation under the cited standard. As previously discussed, GM supervisors tolerated and even encouraged noncompliance with the plant's own lockout program, as well as with the requirements of the standard. Indeed, lockout was rarely used, and even when equipment was shut down for servicing, locks were often not applied. Based on this evidence, we find GM's widespread failure to enforce its employees' use of LOTO demonstrates a lack of diligence in detecting hazardous conditions and enforcing work rules. *See N & N Contractors, Inc.*, 255 F.3d at 127 (indicating reasonable diligence includes inspecting work area and anticipating hazards, adequate employee supervision, implementation of proper training program and work rules). Thus, for the citation items where noncompliance is established, we find GM had constructive knowledge of its employees' need for retraining based on their inadequate knowledge and/or use of energy control procedures. *Id.* (finding constructive knowledge of failure to use fall protection where employer knew of employees' tendency to ignore its use, and supervisor had previously observed employees' disregard of fall protection measures).

Item 12 – Millwright Kenneth Thompson worked from 1986 until after the accident in the body shop on the maintenance shift, where his job assignment included building equipment and performing servicing, which occurred approximately "once a week, maybe less." Thompson did "[n]ot normally" attach a lock to machinery that he worked on, and refused to use his safety lock because it could be opened with any one of the more than sixty "grand master key[s]," defeating the purpose of "private" protection. During his work rebuilding the entire lower section of the motor rail conveyor in the year before the accident, the power sources had been shut off, but Thompson "didn't lock . . . out any time during that week." According to Thompson, supervisors were in the area when he performed servicing without locking out, which he "assume[d]" they observed. Thompson added that in the year before the accident, he had never been told by a supervisor to lock out an energy source. Based on this evidence, we conclude GM failed to provide Thompson with required retraining under the cited provision of the standard and had constructive knowledge of his need for retraining. Accordingly, we affirm this item.

Item 20 – Toolmaker Eulan Ray Edwards worked in the body shop from the time of his initial hire in 1978 until the time of the accident, where he serviced "anything that moves or works." Edwards never locked out machines until after the accident, and his supervisors saw him "not using [his] lock when [he] should have locked out[.]" According to Edwards, he had only one lock that was "too much trouble to use . . . but after a man got killed, well, then, it was just, you know, gung ho." When asked whether supervisors enforced the lockout procedures taught in the training, he replied: "No. They had never been enforced until after the man was dead." Based on this evidence, we conclude GM failed to provide Edwards required retraining under the cited provision of the standard and had constructive knowledge of his need for retraining. Accordingly, we affirm this item.

Item 36 – Electrician Edward Baker worked for over nine years, until one month prior to the hearing, on the first shift in the body shop, which contains "hundreds of different kinds" of machines, including robots, welders, and conveyor systems. Although it was his "regular job as an electrician to work on equipment," Baker did not receive a safety lock until after the accident and, therefore, lacked the ability to lock out a machine. Prior to the accident, he did not lock out the machinery he worked on and "didn't see any enforcement of [lockout]." Between the time of his 1987 training and the 1991 accident, he was "sure" his supervisors saw him working on machines without locking out. Based on this evidence, we conclude GM failed to provide Baker

with required retraining under the cited provision of the standard and had constructive knowledge of his need for retraining. Accordingly, we affirm this item.

Item 37 – Electrician Patrick H. Parker worked in the motor rail area from about December 1990 until the time of the hearing, where he serviced and repaired the motor rail equipment. He described his initial lockout training as a "formality" and until the time of the accident, he did not lock out the energy sources on equipment he serviced, noting that some equipment can be locked out and some can not. He had only one safety lock, which "was not sufficient to . . . put [him] in a safe area whenever [he] was working on a machine." Parker also stated that employees "were more or less discouraged" from putting locks on machines before the accident, and that there "[n]ever was . . . really . . . any stress put on lock-out procedure." Based on this evidence, we conclude GM failed to provide Parker with required retraining under the cited provision of the standard and had constructive knowledge of his need for retraining. Accordingly, we affirm this item.

Item 38 – Millwright Michael Dan Warden worked in the maintenance department servicing equipment throughout the "whole plant" since about 1985, and performed this maintenance work on breakdowns until the time of the accident. On the whole, his testimony shows he attempted to properly utilize lockout when servicing equipment, and actively resisted and protested supervisors' instructions to perform service without properly shutting down and locking out. He even walked off jobs, refusing to work when breakdown repairs were performed without lockout. Prior to the accident, Warden did use his safety lock, but the practice in the plant was to leave lockout up to the individual employees—"They left that up to you. If you wanted to use [lockout], fine. If you didn't - -[shrug][.]" However, Warden also serviced new equipment in the year before the accident that involved multiple energy sources for which he "just shut off the main electrical components . . . ." He explained he had not been trained on how to shut off the air or when it should be shut off.

We find that Warden's testimony underscores GM's awareness of the widespread and pervasive practice in the plant to service equipment without utilizing proper lockout procedures, even after the standard came into effect. Although Warden mostly utilized lockout, he also serviced multiple-energy-source equipment without using lockout in the year prior to the accident, thus triggering a need to retrain under the cited provision of the standard. Based on this

evidence, we conclude GM failed to provide Warden required retraining and had constructive knowledge of his need for retraining. Accordingly, we affirm this item.

Item 40 – Electrician Samuel David McGahey, Jr., performed servicing and maintenance in the motor rail area up to the time of the accident, normally without locking out at all and never locking out the air. According to McGahey, in the year prior to the accident, supervisors saw him not locking out while servicing equipment and allowed the work to continue. Based on this evidence, we conclude GM failed to provide McGahey with required retraining under the cited provision of the standard and had actual knowledge, as well as constructive knowledge, of his need for retraining. Accordingly, we affirm this item.

Item 41 – Millwright Dennis A. Cook worked on the maintenance shift performing preventive maintenance on "all the machinery" in the body shop from 1985 until the time of the hearing. Cook placed the lock GM had provided to him "[o]n my tool box. I never locked out anything with that lock." He added that "[e]very supervisor I ever had saw me working on something that should have been [locked out] that wasn't . . . ." [18] Based on this evidence, we conclude GM failed to provide Cook required retraining under the cited provision of the standard and had actual knowledge, as well constructive knowledge, of his need for retraining. Accordingly, we affirm this item.

Item 42 – Millwright Maurice W. Lachance worked for the year prior to the accident in the paint department. During that time, Lachance "just work[ed] on the floor trucks" where he was not exposed to energized equipment. He "may have" performed overtime weekend maintenance work during that time period, but the equipment would have been shut down and locked out using his lock, as well as those of the other employees with whom he was working. Although Lachance could neither confirm nor deny that "for all the weekend work [he] performed . . . all the energy sources . . . were locked [out,]" we find the evidence insufficient to establish Lachance performed covered work without using lockout, and worked in a servicing

[18] Cook testified that he tagged out equipment rather than locked it out, which the LOTO standard permits where "an energy isolating device is not capable of being locked out" or the employer demonstrates that "the utilization of a tagout system will provide full employee protection," GM concedes, however, that lockout was feasible here and does not contend that tagout was equally protective. 29 C.F.R. § 1910.147(c)(2)(i) and (ii). Accordingly, Cook's failure to utilize lockout triggered a need to retrain.

and maintenance position during the period covered by the citation. Accordingly, we vacate this item.

Item 43 – Electrician Ron Berry worked at the plant since 1979, and was assigned to work in the maintenance shop from about December 1990 until the time of the hearing, prior to which he worked on a construction crew for about a year. Although before the accident Berry did not lock out certain machines because "it wasn't mandatory" and controlling the energy sources without locking out was "standard," he did not specify a time period for his conduct, and we are unable to discern from the record whether he serviced equipment without locking out on any particular occasion after the standard's effective date. Accordingly, we find the record fails to establish Berry required retraining under the cited provision of the standard, and vacate this item.

Item 46 – Electrician Jim Green worked on the "concern crew" for five years prior to the hearing, servicing "anything electrical" throughout the "whole plant." Green acknowledged he used his safety lock when servicing equipment, but would only lock out the part he was working on, and not "anything that was adjacent to it" because he had only one lock. He indicated that a failure to lock out energy sources other than just the "immediate source" could result in the energization of equipment parts that might hit and seriously injure an employee.

According to Green, the compactor he worked on prior to the accident had multiple energy sources and required more than one lock to lock out, and he worked on equipment without adequate locks "[p]robably once or twice a week sometimes." Although Green's supervisor knew that he had only one lock, supervisors were generally not present when he serviced machines. Based on this evidence, we conclude GM failed to provide Green required retraining under the cited provision of the standard and had constructive knowledge of his need for retraining. Accordingly, we affirm this item.

Item 47 – Toolmaker William L. Crain had worked in the body shop for about five years at the time of the hearing, where "most of the time [he] repair[ed] or work[ed] on the machinery." Crain stated he "[p]robably never" applied his lockout training prior to the accident, later adding that he did not recall ever locking out equipment during the year 1990, but "sometimes . . . may have" done so from the end of 1990 until the date of the accident. He stated unequivocally, however, that although he had his own lock, he did not use it prior to the accident. Based on this evidence, we conclude GM failed to provide Crain required retraining

under the cited provision of the standard and had constructive knowledge of his need for retraining. Accordingly, we affirm this item.

Item 48 – Millwright William Brink, a twelve-year veteran at the plant, worked on the maintenance shift in the body shop performing preventive maintenance until the time of the accident. Prior to the accident, Brink only turned off the equipment he was servicing by using the run/stop button, which he acknowledged does not amount to locking it out "[b]ecause somebody can turn it on." According to Brink, "[t]hat is just the way it was done" until the time of the accident. Based on this evidence, we conclude GM failed to provide Brink required retraining under the cited provision of the standard and had constructive knowledge of his need for retraining. Accordingly, we affirm this item.

Item 49 – Electrician Kenneth McGahey worked in the motor compartment performing service and maintenance on multiple-energy-source equipment for eight years prior to the hearing. McGahey never received a safety lock and before the accident, he "never locked anything out[.]" According to McGahey, GM supervisors were "sometimes" present when he serviced equipment without using lockout, and "[e]veryone [he] ever had" might have seen him work without applying locks. Based on this evidence, we conclude GM failed to provide McGahey required retraining under the cited provision of the standard and had constructive knowledge of his need for retraining. Accordingly, we affirm this item.

Item 51 – Maintenance electrician James A. Winters worked at GM since 1981 and had been assigned to the trim and chassis department since about December 1990. Up until the time of the accident, Winters did not lock out all energy sources on machines that he serviced, but controlled energy sources by just shutting off the power. According to Winters, supervisors were present at breakdown situations where he did not use lockout to isolate energy sources. Based on this evidence, we conclude GM failed to provide Winters required retraining under the cited provision of the standard and had constructive knowledge of his need for retraining. Accordingly, we affirm this item.

Item 52 – Electrician James David Roberts III began his employment at GM in 1984, but temporarily worked as a skilled-trades maintenance supervisor for the six months prior to the accident, during which time he apparently performed no service or maintenance work. Although Roberts had previously performed service and maintenance work without fully locking out multiple-energy-source equipment, any need for retraining did not continue during the period

covered by the citation. Moreover, GM provided additional training to Roberts upon his transfer back to hourly work after the accident. In these circumstances, we find the record does not establish GM failed to provide Roberts required retraining under the cited provision of the standard. Accordingly, we vacate this item.

E. WILLFUL CITATION 1, ITEMS 53-57 – MOTOR RAIL ACCIDENT

These five citation items pertain to the accident in which millwright Smith suffered fatal injuries while working on the motor rail conveyor. Under these items, the Secretary alleges GM failed to shut down the conveyor, isolate its energy sources, apply the required lockout devices, render safe any stored or residual energy, and verify that its deenergization had been accomplished. 29 C.F.R. § 1910.147(d).[19] It is undisputed Smith did not utilize LOTO procedures during the conveyor repair job. In vacating these items, the judge concluded the cited provisions of the standard were inapplicable, finding Smith and electrician Patrick Parker, who was assisting Smith at the time of the accident, "had not reached the point of shutting down the equipment; rather, Parker had activated the lift so that Smith could watch it operate." For the following reasons, we find the evidence establishes the applicability of the cited provisions of the standard, and affirm all five items.

PRINCIPLES OF LAW

The LOTO standard provides a set of "elements and actions" that energy control procedures must cover and mandates the sequence in which the application of energy control must be accomplished through these actions. 29 C.F.R. § 1910.147(d). Specifically, the standard requires, in the following sequence: machine shutdown; energy isolation; application of the necessary lockout devices; restraint and rendering safe any hazardous stored or residual energy; and verification that the isolation and deenergization of the machine is complete. 29 C.F.R. § 1910.147(d)(2)-(6).

These procedures apply "to the control of energy during servicing and/or maintenance of machines and equipment," but not to normal production operations. 29 C.F.R. § 1910.147(a)(2)(i) and (ii). The standard defines "[s]ervicing and/or maintenance" as follows:

> Workplace activities such as constructing, installing, setting up, adjusting, inspecting, modifying and maintaining and/or servicing machines or equipment.

[19] The citation alleged violations of 29 C.F.R. § 1910.147(d)(2), (d)(3), (d)(4)(i), (d)(5)(i), and (d)(6).

> These activities include lubrication, cleaning or unjamming of machines or equipment and making adjustments or tool changes, where the employee may be exposed to the *unexpected* energization or startup of the equipment or release of hazardous energy.

29 C.F.R. § 1910.147(b). The standard does not apply to "certain servicing operations which . . . must take place without deenergization, such as operational testing of machines or equipment"—"[l]ocking out or tagging out cannot be performed during these operations, since both lockout and tagout require that equipment to be deenergized." Lockout/Tagout I, 54 Fed. Reg. at 36,647.

ANALYSIS

GM contends the requirements of the LOTO standard did not apply here because Smith was still "troubleshooting" the equipment to evaluate how to approach and complete the necessary repairs. Given the language and intent of the standard, however, troubleshooting is considered an element of servicing a machine, i.e., the employee inspects or observes the machine in an effort to discover how to fix it. 29 C.F.R. § 1910.147(b). In circumstances where troubleshooting consists of observing or inspecting equipment when it is stationary, the standard requires deenergization and application of lockout procedures. In circumstances where troubleshooting requires "operational testing"—observing equipment that is energized and in motion—the standard would not apply. Lockout/Tagout I, 54 Fed. Reg. at 36,647.

On the evening before the accident, Smith's supervisors assigned him the tasks of replacing worn bushings on the motor rail conveyor and correcting the alignment of the conveyor's brass guide block, but only if he determined the block was rubbing against the conveyor's lift table. It is undisputed Smith would have needed to observe the conveyor powered and in operation to troubleshoot both the worn bushings and the guide block alignment at some time prior to commencing the necessary repairs, which he did for about fifteen minutes during the two-hour overlap between the evening and night shifts. Although the parties, as well as the judge, focused on the instant of the accident to determine whether the standard applied, we find that determining whether lockout was necessary here extends beyond that particular moment, encompassing the entire time Smith was working with the conveyor. *Cf. Cleveland Consol., Inc.*, 13 BNA OSHC 1114, 1116 n.1, 1986-87 CCH OSHD ¶ 27,829, p. 36,427 n.1 (No. 84-696, 1987) ("the cause of an accident, and particularly whether a violation of a standard caused an accident, is not necessarily relevant to whether an employer violated a regulation").

Patrick Parker, the electrician who assisted Smith, provided the only eyewitness accounts of the events leading up to the accident. These accounts consist of statements to the responding police officer shortly after the accident, to OSHA personnel during interviews conducted within the first few days of the accident and several weeks later, as well as hearing testimony over a year later, by which time his recollection had faded. Parker's most detailed contemporaneous statement, given to an OSHA investigator four days after the accident, reads, in relevant part:

> [Smith] came to me and asked to turn the power off . . . I turned the control panel off at the console. Then he asked me to reset the electrica[l] panel so he could pull the carriers back. I reset the panel, [Smith] pulled a couple of carriers back and tied them to secure them. Next he walked to the south side of the slide conveyor and I turned the electrical panel off. [Smith] leaned into the slide conveyor on the south end, at that point the electrical [panel] was off but the air was on and I walked over to the spot welder to turn it off. [Smith] asked me what he should do next, I said that the machine should be turned back on so he could see how it operates. I reset the control panel at the WLD panel and as I was walking to the console he walked to the east side of the conveyor and leaned into the conveyor as I had my back turned to the console . . . That is when the conveyor activated and struck [Smith]. I hit the lift button to lower the lift.

This description of the full sequence of events leading up to the accident establishes that Smith approached Parker with the specific purpose of shutting down the machine so that he could perform his assigned task of replacing the worn bushing—a task that clearly constitutes "service and maintenance" within the meaning of the LOTO standard. With this objective, Parker twice turned off the power and Smith placed himself in the danger zone by leaning into the machine. *E.g.*, *S & G Packaging Co.*, 19 BNA OSHC 1503, 1506, 2001 CCH OSHD ¶ 32,401, p. 48,890 (No. 98-1107, 2001) (finding exposure established where employees were within one to two feet of hazard). Based on this evidence, we find that for some period of time prior to the accident, when the electrical power was turned off after Smith had secured the carriers and leaned into the machine, he was in the process of performing a servicing activity while the conveyor was stationary and for which deenergization and use of LOTO were possible but not used. *See Hamilton Fixture*, 16 BNA OSHC 1073, 1091, 1993 CCH OSHD ¶ 30,034, p. 41,187 (No. 88-1720, 1993) (finding brevity of condition does not negate presence of hazard), *aff'd*, 28 F.3d 1213 (6th Cir. 1994). In these circumstances, we conclude the LOTO standard applied.

With respect to knowledge, supervisory personnel assigned the motor rail conveyor repair job to Smith, but there is no evidence GM was actually aware that Smith and Parker did not use

lockout procedures while they worked with the conveyor. Nonetheless, management knew Smith had only recently been reassigned to the motor rail area, had not yet been provided with retraining, and was unfamiliar with the equipment. Indeed, Smith complained to supervisor Jim Brown before attempting to service the conveyor because he believed the servicing job was not meant for a millwright, stating he "didn't want to get [his] damned head caught in" the conveyor. Nonetheless, management did not assign someone more familiar with the conveyor to assist him. These circumstances, in conjunction with GM management's failure in enforcing compliance with its energy control program or with the LOTO standard throughout the plant, establish GM had constructive knowledge of its employees' failure to comply with the cited provisions during the conveyor repair work. *N & N Contractors, Inc*, 255 F.3d at 127. Accordingly, we conclude the failure to shut down the conveyor, isolate its energy sources, apply the required lockout devices, restrain all potentially hazardous stored or residual energy, and verify that its deenergization had been accomplished violated the cited provisions of the standard, and affirm Items 53-57.

VI. CHARACTERIZATION

The Secretary alleged all cited violations as both serious and willful, and the judge agreed, characterizing each of the citation items he affirmed as alleged. The judge emphasized that lockout at the GM plant was "unenforced and seldom used . . . despite the fact that the facility had . . . a lockout procedure and . . . training since its inception." He also found GM "was aware of the need to control hazardous energy in its facilities" and "well aware of the promulgation of the LOTO standard and its requirements," noting that "four GM facilities were cited in 1990 for violations of the standard."[20] The judge rejected GM's contention that it had an effective lockout program, and that grievances, complaints, and problems were addressed in good faith as part of what GM characterized as "a dynamic labor relations atmosphere." For the following reasons, we affirm as willful Items 1a, 1b, 2, 12, 20, 32, 36-38, 40, 41, 46-49, 51, and 53-57, and affirm as serious Items 1c, 3, 4, 7, 14, 16, and 44.

PRINCIPLES OF LAW

As the Commission has stated, "[t]he hallmark of a willful violation is the employer's state of mind at the time of the violation — an 'intentional, knowing, or voluntary disregard for

[20] These four prior citations—issued to other GM plants before the 1991 accident—include alleged violations of § 1910.147(c)(4)(i), (c)(4)(ii), and (c)(7)(i).

the requirements of the Act or . . . plain indifference to employee safety.'" *Kaspar Wire Works, Inc.*, 18 BNA OSHC 2178, 2181, 2000 CCH OSHD ¶ 32,134, p. 48,406 (No. 90-2775, 2000) (citation omitted), *aff'd*, 268 F.3d 1123 (D.C. Cir. 2001). This state of mind can be established by showing that "'the employer was actually aware, at the time of the violative act, that the act was unlawful, or that it possessed a state of mind such that if it were informed of the standard, it would not care.'" *AJP Constr. Inc. v. Sec'y of Labor*, 357 F.3d 70, 75 (D.C. Cir. 2004) (emphasis and citations omitted). In this regard, the Commission and courts distinguish "between mere negligence and willfulness, holding that the former is sufficient for affirming a non-willful violation, but that willfulness is characterized by an intentional, knowing failure to comply with a legal duty." *Manganas Painting Co.*, 21 BNA OSHC at 1991, 2007 CCH OSHD at p. 53,406 (citing *Am. Wrecking Corp. v. Sec'y of Labor*, 351 F.3d 1254, 1264 (D.C. Cir. 2003)) (reversing willful finding where employer "should have known" of hazardous condition, court stated that willfulness requires "an intentional or conscious disregard for the applicable safety standard or for employee safety").

ANALYSIS

We agree with the judge that GM was keenly aware of the LOTO standard and its requirements. In fact, GM established an energy control program well before the OSHA standard was promulgated, and was involved with the LOTO standard's subsequent development. GM staff engineer Richard Parry served on an automobile industry task force that worked with OSHA on the standard from the time it was proposed through its promulgation. Michael Taubitz, GM's Assistant Director of Occupational Safety and Health, was a member of a joint UAW-GM committee on health and safety that reviewed and analyzed the LOTO standard after its promulgation. Moreover, in anticipation of the standard's impending effective date, GM headquarters sent a memorandum to all plant managers and personnel directors in October 1989, advising them of the new OSHA standard and that it would "require review and/or revis[ion]" of GM's lockout procedures "to insure compliance."

In March 1990, just three months after the standard went into effect, GM headquarters sent another memorandum to its plant managers and personnel directors in which it identified specific items in the LOTO standard that "need[ed] to be addressed . . . to comply with the standard." The areas identified by the memorandum include developing an energy control program, creating a list of authorized employees, issuing standardized locks and tags, and

establishing training and retraining requirements, as well as a periodic inspection. By electronic message soon thereafter, the Oklahoma City plant's UAW representative, Gary Klingel, reminded plant supervisors of the new LOTO standard and the need to utilize lockout during service and maintenance; he also requested that the safety department be notified of any employees who still needed training. Klingel closed his message by cautioning that "[n]obody desires or wants a fatality at the OKC plant." Based on this evidence, we find GM was well-informed of the need for deenergization during servicing and maintenance activities, as well as the existence of the LOTO standard and many of its particular requirements.

A. ITEMS 1a, 1b, and 1c – ENERGY CONTROL PROGRAM AND PROCEDURES

Item 1a (energy control program) – Although it is undisputed that GM had an energy control program, it lacked the required periodic inspection element. Managerial personnel at the GM plant knew of the LOTO standard's inspection requirement, as well as the plant's non-compliance with it. Indeed, plant safety and ergonomics manager Young fully appreciated that the plant's "existing program was compliant, with one exception[]"—"[t]he need to conduct a periodic audit." As he explained, GM was "aware that the audit provisions of the lockout standard needed review, and we were reviewing it." GM's March 1990 memorandum to plant management concerning the new LOTO standard also highlighted the need to "establish a schedule and assign responsibility for an annual inspection of the energy control program."

We conclude this evidence establishes GM knowingly failed to include the requirement for an annual inspection in its energy control program. *See Kaspar Wire Works, Inc.*, 268 F.3d at 1127-29 (affirming violation as willful, court emphasized "actual malice is not required; it is sufficient that there be substantial evidence of voluntary and intentional disregard for or indifference to the law"); *see also TWA v. Thurston*, 469 U.S. 111, 126 n.19 (1985) (noting employer's action may be willful in absence of "evil motive or bad purpose"). Accordingly, we affirm this item as willful.

Item 1b (use of energy control procedures) – GM's failure to utilize required lockout procedures was pervasive. Despite GM's longstanding knowledge of the need to control hazardous energy during servicing and maintenance activities, its knowledge of the OSHA standard and its requirements, and its adoption of an energy control program, the company knowingly tolerated and sometimes encouraged the widespread and routine practice of

performing service and maintenance of energized equipment without the application of required lockout procedures—even after the standard's effective date. GM also failed to adequately equip some of its authorized employees with a safety lock until after the accident, depriving them of an essential tool of lockout protection. This evidence establishes a conscious disregard for the requirements of the Act. Accordingly, we affirm this item as willful.

Item 1c (specificity of energy control procedures) – GM's energy control procedure was inadequate to lock out the plant's more complex equipment and did not contain the specificity prescribed by the standard. Nonetheless, we see no evidence in this record to establish that GM appreciated its procedure was deficient. GM staff engineer Parry explained that the energy sources and magnitudes for the plant's equipment were "universal throughout the whole plant and that energy isolation devices were also similar throughout the plant." According to Parry, he had surveyed the machines and equipment at the plant and did not find a single machine or piece of equipment "where an employee could not effectively control the hazardous energy" following the plant's written lockout procedure. Moreover, it appears that at least some employees had sufficient experience with the motor rail conveyor to apply lockout procedures to that particular equipment.

In these circumstances, the record does not establish that GM knowingly failed to establish an adequate energy control procedure, or that it would not have done so had it known of the procedure's deficiencies. Accordingly, we find the record lacks support for a willful characterization of this item and affirm Item 1c as serious. *See* 29 U.S.C. § 666(k) (defining serious violation as one in which "there is a substantial probability that death or serious physical harm could result").

B. ITEM 2 – PERIODIC INSPECTION

GM managerial personnel knew of the LOTO standard's requirement for an annual periodic inspection of the energy control program and recognized that one had not been conducted by the time OSHA commenced its April 1991 inspection, over one year after the standard's specified January 2, 1990 effective date. Lockout/Tagout II, 54 Fed. Reg. at 46,610. Although safety and ergonomics manager Young claimed to believe the first periodic inspection was not required until one year after issuance of OSHA's September 1990 LOTO compliance directive, rather than one year after the standard's effective date, GM has provided no evidence to show that its misunderstanding was well-founded. On the contrary, the compliance directive

itself reiterates that "[a]ll requirements of [the standard] have an effective date of January 2, 1990." In these circumstances, we find GM's asserted belief as to the required compliance date to be neither plausible nor reasonable. *See Manganas Painting Co.*, 21 BNA OSHC at 1994, 2007 CCH OSHD at p. 53,409 (finding that evidence showed employer "could not have plausibly maintained a good faith belief that it was exempt from complying with the standard's requirements"). Accordingly, we affirm this item as willful.

C. ITEMS 3, 4, 7, 14, 16, 44 - INITIAL TRAINING

Well before the promulgation of the LOTO standard, GM established a lockout training program jointly with the UAW, and pursuant to this program, provided initial lockout training to most of its servicing and maintenance employees. GM also included some discussion of lockout in its robotics and laser training sessions, as well as in periodic safety talks. Although GM charged its employee-trainers with the responsibility of tracking attendance at the lockout training sessions and failed to adequately follow-up so as to ensure each authorized or affected employee received required training pursuant to the standard, the company believed the verbal assurances of the employee-trainers that all of its employees had indeed been given the required training.

In these circumstances, we conclude the evidence shows GM had constructive rather than actual knowledge of its failures to provide initial training to the employees who are the subject of these six citation items. Moreover, given GM's training efforts—both before and after promulgation of the LOTO standard—we see no basis on which to find GM would not have provided required initial training had it actually known of the deficiencies. Accordingly, based on applicable precedent, we affirm these six citation items as serious. *Manganas Painting Co.*, 21 BNA OSHC at 1998, 2007 CCH OSHD at p. 53,412 (rejecting willful characterization where employer had constructive knowledge and factual circumstances did not support willfulness).

D. ITEMS 12, 20, 32, 36-38, 40, 41, 46-49, 51 - RETRAINING

In addition to GM's general knowledge of the LOTO standard, the March 1990 memorandum from company headquarters to all plant managerial personnel specifically identified retraining as one "of the items that need to be addressed . . . to comply with the standard." The memorandum specifically identified the following four circumstances in which retraining "shall be provided for all authorized and affected employe[e]s[:]"

- a change in job assignments
- a change in layouts or processes
- a change in the energy control procedure
- a periodic inspection reveals there are deviations or inadequacies in the energy control procedure

GM's own health and safety trainer, Jesse Kincannon, recommended to the plant safety department that "they needed to do lock-out refresher training . . . to be in compliance with the [new] standard." Kincannon explained that he read the LOTO standard to require "some kind of annual training . . . specific on the equipment" and "[w]hen you move someone around from one area of the plant to another area of the plant, if they are not familiar with that equipment[,] they need specific training."

Nonetheless, the record contains no evidence that GM ever provided retraining upon an employee's change in job assignment or when it observed employees servicing equipment without properly utilizing lockout. Indeed, GM's plant supervisors and management failed to enforce compliance with GM's energy control program or with the OSHA LOTO standard. In fact, as we have discussed above, GM supervisory personnel tolerated and even encouraged widespread noncompliance with the lockout requirements of the standard, sometimes in pursuit of timely meeting production goals. Thus, GM's failure to provide retraining in response to Smith's reassignment or any other individual employee's failure to use lockout procedures was consistent with its overall disregard for the utilization of fully compliant lockout protection.

In these circumstances, we conclude that GM's failure to provide required retraining shows a conscious disregard for the requirements of the standard. *See AJP Constr. Inc.*, 357 F.3d at 75 (holding violation willful where employer was "aware of the unsafe conditions and yet chose not to correct them"). Moreover, this failure reflects an attitude from which we infer, in circumstances where GM might have lacked knowledge of a particular employee's need

for retraining, the company would not have provided the retraining even if it had known. *Id.* at 74 (stating that willfulness may be found in absence of actual knowledge where evidence showed that employer "*possessed a state of mind such that if it were informed of the standard, it would not care*") (citation omitted). Accordingly, we affirm all of the retraining violations as willful.

E. ITEMS 53-57 – MOTOR RAIL ACCIDENT

There is no evidence GM supervisory personnel had actual knowledge that its employees were performing the repair work on the motor rail conveyor on April 4, 1991 without applying LOTO. Nonetheless, GM's overall disregard for the utilization of a fully compliant energy control program establishes it had constructive knowledge of these violations. These circumstances, combined with GM management's failure to retrain millwright Smith, and its awareness of and failure to address Smith's concern about his competence to service the conveyor, demonstrate an attitude of plain indifference from which we infer that, had GM known of its employees' noncompliance with the standard's requirements, it would not have cared. *Id.* at 74 (stating that willfulness may be found in absence of actual knowledge where evidence showed that employer "*possessed a state of mind such that if it were informed of the standard, it would not care*") (citation omitted); *see also Caterpillar Inc.*, 17 BNA OSHC 1731, 1733. 1995-97 CCH OSHD ¶ 31,134, p. 43,483 (No. 93-373, 1996) (finding willful violation where employer assigned repair job presenting known hazard to "non-management employee whose prior safety concerns it had rebuffed"), *aff'd*, 122 F.3d 437 (7th Cir. 1997).

We also reject GM's contention that willfulness here is obviated because it acted in good faith in its attempts to comply with the LOTO standard's requirements. *See Arcadian Corp.*, 20 BNA OSHC 2001, 2018-19, 2005 CCH OSHD ¶ 32,756, pp. 52,083-84 (No. 93-0628, 2004) (finding no evidence of good faith); *Atl. Battery Co.*, 16 BNA OSHC 2131, 2160-61, 1991-93 CCH OSHD ¶ 30,636, p. 42,476 (No. 90-1747, 1994) (finding good faith belief not reasonable if employer knew or should have known its policies are incorrect). There is no dispute that the standard permits power-on "operational testing of machines or equipment" as an exception to the applicability of LOTO to servicing and maintenance. Lockout/Tagout I, 54 Fed. Reg. at 36,644, 36,647. However, there is no evidence in the record to show that GM could have believed its employees' activities conformed to the LOTO standard's requirements at the time the conveyor repair work was performed. Indeed, no supervisory personnel were present when

Smith and Parker worked on the conveyor, and GM's standard practice was to perform servicing and maintenance without utilizing lockout. Accordingly, we affirm these items as willful.

VII. PER-EMPLOYEE CITATION

The Secretary cited, and the judge affirmed, all of the initial training and retraining violations on a per-employee basis with individual penalties assessed for each item. For the following reasons, we conclude that both the initial LOTO training provision, § 1910.147(c)(7)(i), and the retraining provision, § 1910.147(c)(7)(iii)(B), under which we affirm six and twelve citation items, respectively, are susceptible to per-employee citation. Accordingly, we separately affirm each of these items, and assess individual penalties.

PRINCIPLES OF LAW

Under Commission precedent, "per-instance violations and penalties are appropriate when the cited regulation or standard clearly prohibits individual acts rather than a single course of action." *Eric K. Ho*, 20 BNA OSHC 1361, 1370, 2002-04 CCH OSHD ¶ 32,692, p. 51,583 (No. 98-1645, 2003) (consolidated cases) ("*Ho*"), *aff'd sub nom. Chao v. OSHRC*, 401 F.3d 355 (5th Cir. 2005); *see also J.A. Jones Constr. Co.*, 15 BNA OSHC 2201, 2213, 1993 CCH OSHD ¶ 29,964, p. 41,032 (No. 87-2059, 1993); *Caterpillar Inc.*, 15 BNA OSHC 2153, 2172, 1993 CCH OSHD ¶ 29,962, p. 41,005 (No. 87-0922, 1993); *Sanders Lead Co.*, 17 BNA OSHC 1197, 1203, 1993-95 CCH OSHD ¶ 30,740, p. 42,692 (No. 87-260, 1995). "The key . . . [is] the language of the statute or the specific standard or regulation cited." *Ho*, 20 BNA OSHC at 1371 & n.9, 2002-04 CCH OSHD at p. 51,581 & n.9; *see also Manganas Painting Co.*, 21 BNA OSHC at 1995, 2007 CCH OSHD at pp. 53,409-10.

The Commission has specifically considered the question of per-employee citation authority under a training standard in only two previous cases. Addressing a construction training standard where the wording specifically obliged "[t]he employer . . . to instruct *each employee* in the recognition and avoidance of unsafe conditions," the Commission concluded that the provision "clearly may be read to permit the Secretary to cite separate violations based on the failures to train individual employees." *Andrew Catapano Enters. Inc.*, 17 BNA OSHC 1776, 1780, 1995-97 CCH OSHD ¶ 31,180, p. 43,607 (No. 90-0050, 1996) (consolidated) (emphasis added). The Commission, however, affirmed a single citation in *Catapano*, as the number of citations was impermissibly based on the number of inspection days the same group

of untrained employees worked, rather than on the number of employees the employer failed to train. *Id.*

More recently, the Commission concluded the training provision under the general industry asbestos standard cited in *Ho* was not susceptible to per-employee citation. 20 BNA OSHC at 1373-75, 2002-04 CCH OSHD at pp. 51,583-86. The Commission interpreted the standard's language, which specified a "training program for all employees," to require one program for all employees in the covered categories. *Id.* at 1374, 2002-04 CCH OSHD at p. 51,584. As the eleven citation items at issue in *Ho* pertained to a single group of employees engaged in Class I asbestos operations who were collectively exposed to identical hazards, the Commission affirmed a single training violation. *Id.* at 1373-77, 1374 n.14, 2002-04 CCH OSHD at pp. 51,583-86, 51,583 n.14. Although the Commission majority in *Ho* also characterized the training standard interpretation in *Catapano* as "irrelevant" *dictum*, its decision was silent as to whether the language of the provision at issue in *Catapano* was distinguishable from the provision at issue in *Ho*. *Id.* at 1375 n.18, 2002-04 CCH OSHD at p. 51,584 n.18; *id.* at 1382, 1386 n.12, 2002-04 CCH OSHD at pp. 51,591, 51,594 n.12 (Rogers, Comm'r, concurring and dissenting) (acknowledging nature of Commission's per-employee interpretation of training standard in *Catapano*, but noting that relevant precedent, with which *Catapano* is in accord, "certainly provided notice that a training standard could be so interpreted").

ANALYSIS

As with the training standard addressed in *Catapano*, and in contrast to the training standard addressed in *Ho*, the specific language of the initial training provision cited here identifies the subject of the training obligation as "[e]ach authorized employee." 29 C.F.R. § 1910.147(c)(7)(i) ("Each authorized employee shall receive training in the recognition of applicable hazardous energy sources, the type and magnitude of the energy available in the workplace, and the methods and means necessary for energy isolation and control.") The plain language of the standard, therefore, imposes a specific duty on the employer to train each individual employee. Thus, regardless whether an employer chooses to provide required training to employees individually or collectively, the duty runs to each employee and, under the wording of the standard, any failure to train would be a separate abrogation of the employer's duty to each untrained employee.

In addition, the LOTO standard requires employer certification of lockout training, which must "contain each employee's name and dates of training." 29 C.F.R. § 1910.147(c)(7)(iv). The preamble to the LOTO standard further emphasizes the individualized nature of the training requirement, noting as follows:

> The details will necessarily vary from workplace to workplace, and even from employee to employee within a single workplace, depending upon the complexity of the equipment and the procedure, the employee's job duties and their responsibilities under the energy control program, and other factors.

Lockout/Tagout I, 54 Fed. Reg. at 36,673. Indeed, the evidence here shows GM's plant contained many different types of machinery with different levels of complexity and different types of energy, exposing employees to a variety of hazards involving unexpected energization that differed from one employee to another. Finally, underscoring the individualized nature of the initial training requirement is the threshold principle that "the core concept of lockout/tagout is *personal* protection . . . ." *Exelon Generating Corp.*, 21 BNA OSHC 1087, 1090, 2005 CCH OSHD ¶ 32,841, p. 52,807 (No. 00-1198, 2005). Under these circumstances, we find that the LOTO standard's initial training provision prohibits "individual acts." Accordingly, we conclude the LOTO standard's initial training provision may be cited on a per-employee basis, and individually affirm the six citation items discussed above. *See Manganas Painting Co.*, 21 BNA OSHC at 1995, 2007 CCH OSHD at pp. 53,409-10 (noting that where standard permits per-employee citation, Commission may affirm separate violations despite non-willful characterization).

Similarly, we find the cited retraining provision is also susceptible to per-employee citation, as it expressly identifies the need for individualized retraining based upon the employer's awareness that a specific employee is performing lockout deficiently under the standard. 29 C.F.R. § 1910.147(c)(7)(iii)(B); *see Sanders Lead Co.*, 17 BNA OSHC at 1203, 1993-95 CCH OSHD at p. 42,692 (instance-by-instance penalties appropriate where "standard prohibits individual acts"). This provision specifically targets "deviations from or inadequacies in the employee's knowledge or use of the energy control procedures," an occurrence that would trigger an employer's obligation to retrain only that particular employee. 29 C.F.R. § 1910.147(c)(7)(iii)(B). As the standard explains, this retraining "shall reestablish employee proficiency and introduce new or revised control methods and procedures, as necessary." 29 C.F.R. § 1910.147(c)(7)(iii)(C).

In these circumstances, as with the initial training provision, the standard imposes a specific duty on the employer to retrain each individual employee who demonstrates deficiencies in his knowledge or use of energy control procedures. Moreover, the required retraining must specifically address each employees' particular deficiencies. Accordingly, we conclude this retraining provision may be cited on a per-employee basis, and individually affirm the twelve citation items discussed above. *E.g.*, *Manganas Painting Co.*, 21 BNA OSHC at 1995, 2007 CCH OSHD at p. 53,410 (upholding per-employee citation, as medical removal protection standard implicates protection of individual employees).

VIII. PENALTIES

The Secretary proposed penalties of between $35,000 and $70,000 for each of the citation items. For those items he affirmed, the judge assessed the proposed amounts with the exception of a few items for which he reduced the penalty. As the judge explained, "[t]he Commission is the final arbiter of penalties, and, when so doing, is to consider the employer's size, history and good faith, as well as the gravity of the violations; the gravity of the violations is generally the most significant element." *Hern Iron Works, Inc.*, 16 BNA OSHC 1619, 1624, 1993-95 CCH OSHD ¶ 30,363, p. 41,884 (No. 88-1962, 1994); *see also* Section 17(j) of the Act, 29 U.S.C. § 666(j).

With respect to size, it is undisputed that with 5,000 employees at the Oklahoma City plant alone, GM is a very large employer. As noted earlier, the company also has a history of four prior LOTO citations at other plants. Although GM's initiative in addressing the hazards of unexpected energization by developing a program and training its employees even before the LOTO standard's promulgation would normally warrant some good faith credit, its failure in implementing and enforcing that program after the standard came into effect undermines those earlier commendable efforts. Where GM's supervisory and managerial personnel knew of widespread noncompliance with the requirements of the LOTO standard by servicing and maintenance employees, and tolerated as well as encouraged such hazardous work practices, we see no basis on which to accord GM any good faith penalty credit. We also agree with the judge's conclusion that "the gravity of the violations in this case was high." As evidenced by the fatality that prompted OSHA's inspection here, even momentary exposure to equipment that has not been fully deenergized and locked out poses a significant risk of serious harm or death.

As the highest gravity citation items are those related to the accident, we assess higher penalties for those items. In particular, we assess the maximum penalty for GM's failure to retrain millwright Smith because it not only knowingly reassigned him to work on unfamiliar and complex equipment without providing any retraining, but ignored his legitimate concerns for his own safety in attempting the motor rail conveyor repair. For those items we affirm as serious instead of willful—Items 1c, 3, 4, 7, 14, 16, and 44—we have assessed penalty amounts that reflect the change in characterization. Accordingly, we assess the following penalty amounts for the items we affirm: Item 1a-c - $25,000 (grouped); Item 2 - $35,000; Items 3, 4, 7, 14, 16, and 44 - $2,000 each; Item 32 - $70,000; Items 12, 20, 36-38, 40, 41, 46-49, and 51 - $25,000 each; and Items 53-57 - $50,000 each.

ORDER

We affirm Willful Citation 1, Items 1a-b, 2, 12, 20, 32, 36-38, 40, 41, 46-49, 51, and 53-57 as willful, and Items 1c, 3, 4, 7, 14, 16, and 44 as serious. We assess a total penalty of $692,000, as follows: Item 1a-c - $25,000 (grouped); Item 2 – $35,000; Items 3, 4, 7, 14, 16, and 44 - $2,000 each; Item 32 - $70,000; Items 12, 20, 36-38, 40, 41, 46-49, and 51 - $25,000 each; and Items 53-57 - $50,000 each.

/s/_____
Horace A. Thompson III
Chairman

/s/_____
Thomasina V. Rogers
Commissioner

Dated: December 4, 2007