Some personal identifiers have been redacted for privacy purposes

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. INFRA-RED BUILDING AND POWER SERVICE INC., Respondent.	OSHRC Docket No. 17-1511

Appearances:

Kate O'Scannlain, Solicitor of Labor
Christine Eskilson, Acting Regional Solicitor
Paul Spanos, Senior Trial Attorney
U.S. Department of Labor, Boston, Massachusetts
For Complainant

Dale Kerester, Esq.
Landay Leblang Stern, Boston, Massachusetts
For Respondent

Before: Administrative Law Judge Dennis L. Phillips

DECISION AND ORDER

This proceeding is before the Occupational Safety and Health Review Commission (Commission) pursuant to sections 2-33 of the Occupational Safety and Health Act of 1970, 29 U.S.C. §§ 651-678 (OSH Act). Respondent Infra-Red Building and Power Service Inc. (Infra-Red) is an electrical contractor engaged in the business of "electrical testing and maintenance." Infra-Red is located at 152 Centre Street, Holbrook, MA 02343. (Tr. 94, 205; Joint Exhibit (J.

Ex.) XIII, at 0222; Joint Pre-Hearing Statement (Jt. Pre-Hr'g St), at 13; Stipulation of Fact (SF) 1). On Friday, April 7, 2017, an Infra-Red employee burned his hand while replacing the batteries in a police station's uninterruptible power supply system (UPSS).[1] (Tr. 232; Jt. Pre-Hr'g St; SF 4-5; Resp't Br., at 1; Sec'y Br., at 2; Ex. E). Following an inspection, the Occupational Safety and Health Administration (OSHA) issued a citation to Infra-Red alleging four serious violations of the Electrical standard, 29 C.F.R. § 1910 Subpart S, and proposing a total penalty of $35,492.[2] (Citation, at 6-10; SF 6). Infra-Red filed a timely notice of contest, bringing this matter before the Commission. (Jt. Pre-Hr'g St, at 13; SF 7). On October 16, 2017, the Secretary of Labor (Secretary) filed his complaint. (SF 8). On November 6, 2017, Infra-Red filed its Answer, Affirmative Defenses, Petition, and Request for Hearing. (SF 9). On July 31, 2018, the Court granted Complainant's assented to Motion to Amend Complaint and Citation to replace "[o]n or about 5/3/2017" with "[o]n or about 4/7/2017" so as to identify April 7, 2017 (the date that Infra-Red's employees, [redacted] and Daniel Lueck, worked at the Nantucket police station) as the date of the alleged hazard rather than the previously stated date of May 3, 2017.

A two-day hearing was held in Boston, Massachusetts on June 26 and 27, 2018. Seven witnesses testified. The Secretary called two witnesses, Daniel Lueck and Thomas Charles McDonald (Tom McDonald). Infra-Red called the remaining witnesses: Robert J. McDonald (Bob McDonald), Danielle Marie Rega, Andrew Gordon Francis, James John Amara, and Dean David Vanasse. Lueck is a journeyman electrician who was assigned to the Nantucket UPSS job. (Tr. 37, 269, 342-43). Tom McDonald is Infra-Red's president and owner.[3] (Tr. 149-50). Bob

[1] The police station was located at 4 Fairgrounds Road, Nantucket, Massachusetts 02554 (job site). (Tr. 10; J. Ex. XIII). The UPSS "is designed to provide many years of reliable power supply and protection from power failure, brown-outs, line noise and voltage transients." (Tr. 206-07; Ex. E, at 0011).

[2] OSHA also issued Infra-Red a second citation alleging an other-than-serious violation; the Secretary withdrew this citation at the hearing. (Tr. 13; Jt. Pre-Hr'g St, at 13, 16).

[3] Tom McDonald founded Infra-Red in May 1990. He earned his journeyman electrician's license in about 1998 and his master's license in about 2000. (Tr. 203-04).

McDonald is Infra-Red's "Operations Manager," and his responsibilities include managing operations and sales employees, vehicles, accounts, and payroll. Bob McDonald is Tom McDonald's brother. (Tr. 150, 228-29, 334-36). Rega is the company's head of scheduling and is responsible for scheduling work assignments.[4] (Tr. 230, 426-28). Francis is an employee responsible for maintaining the company's equipment and distributing personal protective equipment (PPE) to technicians. (Tr. 236-37, 357). Amara is an OSHA Compliance Officer (CO) who investigated the Nantucket incident.[5] (Tr. 466-67). Finally, Dean David Vanasse is the owner and operator of Boston Safety Training, a company that, since about the Fall, 2012, provides training on all aspects of workplace safety.[6] (Tr. 520-21, 529).

The Court found Vanasse qualified to testify as an expert on: 1) Arc flash and electrical safety (NFPA 70E and OSHA Subpart S sections 1910-331 through 335, 2) OSHA and NFPA 70E Workplace Safety, 3) Shock and Arc flash protection of PPE, 4) Compliance with the requirements of the standards associated with the citation, 5) Electrical safety related training, work policies and practices, and tools, 6) Electrical equipment maintenance, and 7) Hazard mitigation, and risk analysis.[7] (Tr. 591-92; Jt. Pre-Hr'g St, at 10-11). Vanasse founded Boston Safety Training after working with and becoming knowledgeable of electrical hazards in various positions, including working for electrical equipment manufacturers, for a nuclear station, and being responsible for

[4] Rega earned her college degree in philosophy in 2003. For nine years, she worked in the office of an environmental lab processing samples. Rega started working at Infra-Red in 2013 as an assistant to the head of scheduling. She became head of scheduling in late 2015. Rega is not an electrician and has never worked with batteries. She said she schedules 15 – 17 electricians each week. (Tr. 427-29, 447). She goes to Chip McDonald for advice if she has a scheduling question about whether an electrician can do a certain job or not. (Tr. 430). Chip McDonald is Tom McDonald's son. Tom McDonald said Chip "has taken over being the general foreman" and is in charge of all of the field technicians and shop personnel. (Tr. 229, 404).

[5] Amara has served as an OSHA CO for about 3 years. (Tr. 467). He received his Bachelor's degree in human resources and business in 2016. (Tr. 468). He is not an electrician.

[6] Vanasse is not a licensed electrician, master electrician, journeyman electrician or apprentice electrician. (Tr. 609).

[7] The Court did not find Vanasse qualified and competent to testify as an expert with regard to conclusions as to whether or not specific OSHA standards have been violated. (Tr. 591).

electrical support systems while working on a nuclear-powered submarine in the Navy. (Tr. 521-29). He specializes in teaching electrical safety; other employees at his company provide training on other safety subjects. (Tr. 530).

The parties both filed post-hearing briefs; Infra-Red also filed a reply brief. In his Post-Hearing Brief, the Secretary proposed a higher total penalty amount than what was originally proposed in the Citation: $51,736. (Sec'y Br., at 23). For the reasons set forth below, the Court vacates citation Items 1 and 2, affirms citation Items 3 and 4, and assesses a total penalty of $15,873.

JURISDICTION

Infra-Red admits that, as of the date of the alleged violations, it was an employer engaged in business affecting commerce within the meaning of section 3(5) of the OSH Act. (Answer at ¶ III). Based upon the record, the Court finds that at all relevant times Infra-Red was engaged in a business affecting commerce and was an employer within the meaning of sections 3(3) and 3(5) of the OSH Act. The Court concludes that the Commission has jurisdiction over the parties and subject matter in this case. (Answer at ¶ I, where Infra-Red admits jurisdiction; SF 3).

CITED STANDARDS

The Secretary alleges that Infra-Red violated four provisions of the Electrical standard, Subpart S of 29 C.F.R. Part 1910. Specifically, the citation alleges:

> Item 1, 29 C.F.R. § 1910.332(b)(1):
>
> Employees were not trained in and familiar with the safety-related work practices required by 1910.331 through 1910.335 that pertained to their respective job assignments [at] Location: 4 Fair Grounds Rd, Nantucket, MA – On or about 4/7/2017 employees were exposed to electrical hazards, where employees were not trained in and familiar with the safety-related work practices required to safely complete the work.
>
> Item 2, 29 C.F.R. § 1910.333(a)(2):

Where exposed live parts were not deenergized (i.e. for reasons of increased or additional hazards or infeasibility), other safety-related practices were not used to protect employees who could be exposed to the electrical hazards involved. Location: 4 Fair Grounds Rd. Nantucket, MA – On or about 4/7/2017 employees were exposed to electrical hazards, were [sic] employee [sic] were exposed to live parts, where other safety-related work practices were not used.

Item 3, 29 C.F.R. § 1910.335(a)(1)(i):

Employees working in areas where there were potential electrical hazards were not provided with electrical protective equipment that was appropriate for the specific parts of the body that needed to be protected and for the work being performed: (a) (LOCATION)(IDENTIFY SPECIFIC OPERATIONS AND/OR CONDITIONS) [at] Location: 4 Fair Grounds Rd. Nantucket, MA - On or about 4/7/2017 employees were exposed to electrical hazards, where proper personal protective equipment was not used.

Item 4, 29 C.F.R. § 1910.335(a)(2)(i):

When working near exposed energized conductors or circuit parts, each employee did not use insulated tools or handling equipment when the tools or handling equipment might have made contact with such conductors or parts [at] Location: 4 Fair Grounds Rd. Nantucket, MA - On or about 4/7/2017 employees were exposed to electrical hazards, where the proper, insulated tools were not used.

(Amended Citation; Tr. 10-12).

BACKGROUND

On February 28, 2017, the Town of Nantucket, Massachusetts, hired Infra-Red to supply and install 60 EnerSys, Type 12HX540, VRLA replacement batteries in a UPSS located at its Nantucket police station for $21,940. (Tr. 48, 274-75; J. Ex. XIII, at 0223; Sec'y Br., at 2; Resp't Br., at 1; Resp't Reply, at 8). A UPSS provides continuous electricity to critical equipment in the event of a power outage. (Tr. 38; Sec'y Br., at 2). The Nantucket police station's UPSS contained two sets of 30 batteries each in two UPS Module Cabinets (Cabinet(s)) connected in a series (60 batteries in total). There were WARNING and DANGER stickers on the top tray holding batteries

in the Cabinet.[8] (Tr. 40, 48, 110-11, 124-28, 145, 272; Exs. E, at 0014, XVI, XVII, at 0240-41). Each battery carried approximately 12 volts of electricity, such that each series of 30 batteries carried approximately 360 volts when all connected. (Resp't Reply, at 8; Tr. 48-49, 220-21, 595). The UPSS was located in the basement of the police station directly below the lobby. (Tr. 38, 131).

Rega initially assigned a journeyman[9] electrician, Lueck, about age 24 at the time, to replace the batteries.[10] (Tr. 39, 140, 151, 269, 442, 445; Sec'y Br., at 2). After arriving at the police station around March 24, 2017, Lueck began by putting the system in "bypass"[11] to divert the electricity feeding the batteries. (Sec'y Br., at 3; Tr. 40-41, 54). He then realized he could not complete the work by himself because each battery weighed 103 pounds and he needed someone to help lift them. (Resp't Reply, at 7; Tr. 40).

On April 7, 2017, Lueck returned to the police station with [redacted], about age 23 at the time, an unlicensed apprentice electrician. At that time, [redacted] had worked at Infra-Red for about twenty-two months.[12] (Tr. 44, 140, 151, 251-52, 340-41, 353; Sec'y Br., at 2; Resp't Br., at

---

[8] Lueck also referred to the two Cabinets as "racks." "RISK OF ELECTRICAL SHOCK. DO NOT TOUCH UNINSULATED BATTERY TERMINALS" – appeared below the word "DANGER", on a rack in front. (Tr. 127-28; J. Ex. XVII, at 240-42).

[9] A "journeyman" is a licensed electrician, in contrast to an "apprentice," who is an unlicensed electrician-in-training. (Tr. 44). Lueck was a journeyman electrician licensed by the Commonwealth of Massachusetts. (Tr. 39).

[10] Infra-Red hired Lueck on a trial basis in January 2017 after Lueck's father, who worked at Verizon, called Tom McDonald. Lueck did not know whether he was still in a 90-day introductory period status as of April 7, 2017. (Tr. 141, 269, 422-23; Ex. 11, at 30). Bob McDonald stated Lueck was still in his 90-day introductory period as of April 7, 2017. (Tr. 422-23). Lueck did not know whether the Nantucket police station job was his first Infra-Red job where he worked by himself on March 24, 2017. (Tr. 141-42).

[11] Lueck described a "bypass" as "taking the UPSS out of the general loop, the direction of power," such that the police station was left "just being on commercial power." (Tr. 40-41).

[12] [redacted] received a diploma from South Shore Vocational Technical High School on June 7, 2013. (Tr. 344-48; Ex. A). New Infra-Red employees are given, and sign for, a copy of Infra-Red's Policy Manual, Employee Handbook, entitled "Infra-Red Building and Power Services Employee Handbook" (Handbook I or Handbook II), when hired. [redacted] signed for his Handbook I, updated September 17, 2012, on June 1, 2015. (Tr. 251-52, 340-41, 421; J. Ex. I, at 0002; Ex. 11, at 2). Handbook I was later updated on August 27, 2015 (Handbook II). (Tr. 252, 342; J. Ex. II, at 0028). Tom McDonald testified that he thought [redacted] would have started working with batteries soon after starting to work at Infra-Red. (Tr. 217-18; J. Ex. II). One Infra-Red record shows he began working on batteries no

1; J. Ex. 1, at 0002). According to Infra-Red, Lueck and [redacted] decided that they would remove the batteries together due to their weight , and then [redacted] would reconnect the new batteries in the basement while Lueck would package the old batteries and load them onto a pallet upstairs. (Resp't Reply, at 7; Tr. 45-46, 131). After [redacted] had connected about 20-24 of the new batteries, an "arc flash" occurred that burned [redacted]'s hand.[13] (Tr. 25-26; Sec'y Br., at 6; Resp't Br., at 18; Jt. Pre-Hr'g St, at 13; SF 5). Lueck was getting off an elevator in the basement when he heard a "pop" and first became aware of the accident. He heard [redacted] yelling in pain. [redacted] seemed to be in "shock." Lueck brought [redacted] upstairs to run his hand under water. Lueck did not see the accident occur and cannot recall what if anything [redacted] said at the time about what he had done or had not done relative to the work. (Tr. 131-33). [redacted] was taken by ambulance to a hospital for treatment. (Tr. 53, 133; Sec'y Br., at 6).

Vanasse testified that an "arc flash" is "the passage of current through the air." He said that "[i]n establishing current flow through air, tremendous amounts of energy are released, equipment is destroyed, and a number of phenomenon occur." (Tr. 555-58; J. Ex. X, at 0089, 0103, 0154). He described an incident in which a worker was injured by an Arc flash, but was wearing PPE, consisting of a suit, helmet and gloves (shown in a photograph) that saved his life even though the PPE was significantly damaged. (Tr. 558; J. Ex. X, at 0155).

In his expert report, Vanasse explained the nature of the April 7, 2017 incident as follows:

> The incident apparently occurred as a result of utilizing an insulated slipjoint pump plier which had exposed uninsulated parts of sufficient dimensions to either bridge the air gap or make contact of one energized cell terminal to another cell terminal of different potential causing a large amount of current to flow through the tool superheating the tool and causing the burn to the employee's hand.

later than January 4, 2016. (Ex. 8). Lueck did not know whether there were any limitations on Apprentice [redacted]'s ability to perform electrical work. (Tr. 44).

[13] Although Infra-Red agrees that what injured [redacted] was "believed to be an arc flash," Infra-Red also maintains that "we don't know [with certainty] what caused the accident . . . ." (Resp't Br., at 18).

(Tr. 571; J. Ex. XVIII, at 0253).[14]

STIPULATED FACTS

The parties stipulated to the following facts in their Jt. Pre-Hr'g St:

1. Respondent is engaged in the business of electrical testing and maintenance.

2. Respondent is an employer engaged in a business affecting commerce within the meaning of Section 3(5) of the Occupational Safety and Health Act of 1970, 29 U.S.C. § 652(5).

3. Section 10(c) of the Act, 29 U.S.C. § 659(c) confers the Occupational Safety and Health Review Commission with jurisdiction over this proceeding.

4. Infra-Red entered into an agreement to perform certain work at the Nantucket Police Station.

5. Infra-Red employee [redacted] performed certain work at the Nantucket Police Department on April 7, 2017 and received an injury to his hand while performing certain of such work.

6. Complainant issued Serious Citation 1, Items 1 through 4, dated July 26, 2017 and issued Other-than-Serious Citation 2, dated August 28, 2017.

7. Respondent timely filed its Notice of Contest.

8. The Complaint was filed and served by letter dated October 16, 2017.

9. The Answer, Affirmative Defenses, Petition, and Request for Hearing was filed and served by letter dated November 6, 2017.

(Jt. Pre-Hr'g St, at 13).

RELEVANT WITNESS TESTIMONY

The witnesses' relevant testimony included the following:

A. About Infra-Red

[14] Vanasse's Expert report in the record does not include any Attachments from Exhibit A through I. (J. Ex. XVIII, at 0254).

Tom McDonald testified that Infra-Red conducts "testing and maintenance of electrical systems," including the maintenance and repair of an UPSS. (Tr. 205, 207). He said that the company has around 40 employees, including 10-12 union electricians.[15] (Tr. 207, 243, 526).

B. The Nantucket UPSS Work and April 7, 2017 Incident

1. Lueck's First Visit to the Job Site on about March 24, 2017

Lueck testified that he was initially assigned to replace the Nantucket police station's UPSS batteries by himself, and he went to the site alone about two weeks prior to the incident to do so.[16] (Tr. 38-39). Tom McDonald testified that "all the work we do is dangerous work", but "[c]hanging batteries [in a UPSS] is a very simple task." He said that it is "a task to be taken seriously, but it's not a complex task . . . ."[17] (Tr. 271-73). Bob McDonald similarly testified that he was surprised the arc flash incident occurred because "the level of difficulty for the job wasn't real high."[18] (Tr. 402). Vanasse, on the other hand, testified that when replacing the batteries [redacted] was exposed to "a high level of danger"; including exposure to a potential shock and arc flash hazard that could result in death or serious bodily harm. (Tr. 626-28; J. Ex. XVIII, at 0246). Lueck was provided with an Owners/Technical Manual for the UPSS by email as a PDF document, and he reviewed it prior to going to the site.[19] (Tr. 102, 444; Ex. E). He said that the UPSS Manual "essentially gives you a list of procedures to go through, how to operate it." (Tr. 54).

---

[15] Bob McDonald testified that Infra-Red had no employee injuries from 2012 through April 6, 2017. (Tr. 363-64).
[16] Two weeks before Friday, April 7, 2017 is about Friday, March 24, 2017.
[17] Tom McDonald was not at the job site on April 7, 2017. (Tr. 271).
[18] Bob McDonald is not an electrician, licensed or otherwise, and has not worked as an electrician. He did not supervise Lueck or [redacted]. (Tr. 335-36, 361, 412).
[19] The manual is entitled "Mitsubishi Electric Automation, Inc. Uninterrupted Power Supply System, 2033C Series, Owners/Technical Manual." (UPSS Manual) (Ex. E). The UPSS Manual states that it contains "important instructions for the 2033C Series Uninterruptible Power Supply Systems that should be adhered to during installation, operation and maintenance of the UPS and batteries." The UPSS Manual also includes an Electrical Hazard "WARNING 1" that states "Lethal voltages exist within the equipment during operation. Observe all warning and cautions in this manual. Failure to comply may result in serious injury or death." (Tr. 142-43; Ex. E, at 0011). Rega also sent a copy of the UPSS Manual by email to [redacted]. (Tr. 446).

Prior to starting any work on his first visit to the job site in late March 2017, Lueck testified that he did not fill out one of the company's job hazard analysis (JHA) forms, which is a checklist of potential workplace safety issues. (Tr. 43). Neither he nor [redacted] did a JHA before beginning work at the job site on April 7, 2017. (Tr. 42-43, 48; Ex. 5). Lueck said that he did not complete the JHA forms in late March 2017 or April 7, 2017 because "[i]t wasn't necessarily required." (Tr. 48). He testified that he had never turned in a JHA form to Infra-Red and had not been trained to complete one. (Tr. 56). Although he did not complete the form, he testified that he performed a JHA prior to starting work on both of his visits to the police station. (Tr. 89, 116-17). From his initial analysis, he testified, "I could see that [the UPSS] was in use, and it was energized, and that I [therefore] suited up [with PPE] for the task of bypassing the UPS."[20] (Tr. 105).

Lueck's first step in the battery replacement involved putting the system in "bypass," which referred to "taking the UPS out of the general loop, the direction of power," so that the police station would be left just on "commercial power."[21] (Tr. 40-41). Lueck testified that he brought his max "43 Cal suit" PPE[22] with him to the job, which he described as a "very thick material that's supposed to be fire resistant" that "covers your body from head to toe," and includes a jacket, overalls/pants, a helmet, and rubber and leather gloves.[23] (Tr. 41-42, 97, 116). Since the system

[20] During courtroom testimony, "UPS" and "UPSS" were used interchangeably unless otherwise identified.
[21] Vanasse testified that "[b]attery systems are infeasible to deenergize, therefore you have to apply some controls. Controls in place would have included the insulated tools, barrier material, and the application of personal protective equipment." (Tr. 566).
[22] The 43 Cal suit was the maximum PPE suit carried by Infra-Red. (Tr. 116).
[23] Infra-red provided Lueck with PPE the first day he started working there. (Tr. 97). Infra-Red's safety program states: "PPE shall consist of at least a 40 Cal suit, 20 KV rubber gloves tested every six months, leather protector gloves, hard cap, face shield, safety glasses, and ear plugs." This PPE is the minimum PPE Infra-Red employees "should have with them on a job, …." (Tr. 179-81, 452; J. Ex. III, at 0056; Ex. 4, at 2). Lueck testified that he wore the 43 Cal PPE suit "because I was interacting with something that was live." (Tr. 41, 116). Francis stated that each electrician receives two sets of rubber gloves, "a zero" rubber glove which is used up to a thousand volts and a "class 2" rubber glove that is used up to 24,000 volts. Either the zero or class 2 rubber gloves go inside a leather glove. (Tr. 452).

was live, Lueck testified that he believes he put on all parts of his PPE suit, except the pants prior to performing the bypass. (Tr. 41-42). He said that since he was "kneeling on the floor in front of it [he] felt protected, but obviously that's not the correct way to wear your PPE" because "you're supposed to wear it all." (Tr. 42). After performing the bypass, Lueck discovered that the batteries, at 103 pounds each, were "too heavy for one man to lift."[24] It was clear to Lueck that the job could not be done by one person. (Tr. 40, 106-08).

2. Lueck and [redacted]'s April 7, 2017 Visit to the Job Site

Lueck returned to perform the job about two weeks later on April 7, 2017 with [redacted], an unlicensed apprentice electrician. (Tr. 44). While driving from the ferry terminal to the police station, which took 20 to 30 minutes, Lueck and [redacted] discussed the work to be performed and the risks involved. (Tr. 123-24). After arriving, Lueck testified that he bypassed the UPSS, and then they both "removed the batteries [together] because they were heavy, so it was a two-man job." (Tr. 45). Removing the batteries required disconnecting small cables ("jumpers") secured to posts on the batteries with bolts. (Tr. 45). Although his testimony is ambiguous, Lueck appeared to say that he disconnected the cables (possibly together with [redacted]). (Tr 45). When asked, "Were you wearing PPE at the time that you disconnected the batteries?" Lueck replied, "I was not."[25] (Tr. 45, 143-44). He acknowledged that there was a "DANGER" sticker on one of the UPSS battery trays in the Cabinet that warned of the hazard of "SULFURIC ACID" that could cause blindness or severe burns. (Tr. 144; J. Ex. XVII, at 241-42). Although he said, "I mean clearly there's a hazard here," he did not see himself at risk at that time. (Tr. 145). But seeing the

[24] Lueck believed that Infra-Red's Sales Manager for the job, Mike Sumner, thought that each battery weighed only 30 pounds, instead of the 103 pounds Lueck found them actually to be. (Tr. 105-07, 337-38; J. Ex. XIII, at 0220).
[25] Lueck later testified that he was wearing all of his 43 Cal PPE suit, except his pants, when he transferred the UPSS on April 7, 2017 because "[i]t's the most protective PPE that is available, as far as my knowledge." Lueck testified that he should have worn the pants because there was an Infra-Red work rule to wear the suit all the time "when performing any type of work on a live source of power." (Tr. 60-63).

pictures of the warning labels at the hearing, he agreed he should have been wearing PPE when carrying the batteries. (Tr. 144-45). Lueck further testified, however, that he could not remember who disconnected the cables or whether they both did. (Tr. 129). According to Lueck, he and [redacted] discussed how they would divide up the remaining tasks "together as a team," and decided that [redacted] would connect the new batteries because "he had been with the company longer and had been exposed to battery changes," while Lueck would "be doing the physical labor of packaging and loading the old batteries onto a pallet in the lobby." (Tr. 46). Lueck described the procedure for connecting the new batteries as being similar to changing a car battery: "so if you were to think of it as a car battery, you have two posts, two terminals on a car battery, and you land jumpers that feed the car . . . ." (Tr. 46).

To secure the cables to the new battery posts, [redacted] used a slip joint pliers tool (Lueck referred to it as "channellocks"), which Lueck lent to him.[26] (Tr. 49, 59). The slip joint pliers were just under ten inches in length and 2 and 1/8 inches in width. Each handle was one-half inch wide. (Tr. 138). Lueck testified that this tool had insulated handles that were rated to 1,000 volts, and "stops" to prevent one's hand from sliding past the insulation. (Tr. 49, 58, 109-10). He said that he determined that it was an appropriate tool for the work from reviewing the UPSS Manual, which instructs technicians to "[u]se tools with insulated handles" when working on batteries. (Tr. 60, 109, 112; Ex. E, at 0035). Lueck, Tom McDonald, and Vanasse all testified that the tool's voltage rating was significantly higher than the maximum potential voltage in the UPSS. (Tr. 111, 292-93, 595). According to Vanasse, the "maximum voltage that [[redacted]] would have been

[26] The channellocks tool was Lueck's personal tool that he had purchased through Amazon. (Tr. 59). Lueck testified that it was his understanding that "we provide our own personal tools." (Tr. 83-84). However, he agreed Infra-Red's Employee Handbook II stated that Infra-Red would provide any of the tools necessary for an employee to complete a job. He also agreed that Infra-Red maintained tools in its shop that Lueck could request. (Tr. 92-94; J. Ex. II, at 37). Tom McDonald testified that he understood that there was a union requirement for Infra-Red union electricians to supply "pliers" when they show up on a job. (Tr. 242).

exposed to was 360 volts." (Tr. 595). In his expert report, however, Vanasse said that [redacted] "should have been aware that there was too much exposed metal on this tool," and he should have instead used an "insulated socket." (J. Ex. XVIII, at 4).

Lueck testified that [redacted] had connected around 20 to 24 batteries when Lueck heard a "pop" and [redacted] screaming. (Tr. 48, 50, 53). He said that [redacted]'s hand was "burned pretty badly," and the batteries were "charred at top." (Tr. 51). Lueck believed that [redacted]'s injury resulted from a "fault cause by . . . crossing of posts – battery posts." (Tr. 49-50).

3. Infra-Red's Electrical Safety Training Program

Bob McDonald testified that Infra-Red requires "[e]very employee" to attend a day-long annual electrical safety training providing by Boston Safety Training. (Tr. 355, 360). Vanasse testified that his company first conducted this training for Infra-Red in 2013, and did so again in 2014, 2016, and 2018. (Tr. 535, 540). He also provided training to a smaller than normal group of about six or seven Infra-Red employees in October 2017. He said that Infra-Red typically tries "to include all of their employees" in the training, including "office staff so they can understand a little more about" what the technicians do. (Tr. 536). According to Vanasse, most companies train their employees less frequently at every three years. (Tr. 535). Vanasse testified that he conducts the training using a Power Point presentation,[27] as well as PPE, and "real-life examples." (Tr. 545-56). He said that the training covers how to work safely, PPE, lock-out/tag-out, the effects of electrical shock and arc flashes on the body, and first aid. (Tr. 553). [redacted] participated in this training on March 21, 2016, along with 13 other people.[28] (Tr. 541-45; J. Ex. XI; Ex. C). Lueck did not take this training prior to the April 2017 incident. (Tr. 74). In October 2017, Lueck

[27] A copy of Vanasse's Power Point presentation is at J. Ex. X. (Tr. 546-47; J. Ex. X).
[28] Vanasse awarded [redacted] a "Certificate of Completion" for attending and demonstrating understanding of a 6-hour Electrical Safety Course based on OSHA, 29 CFR 1910 Subpart S Regulations and NFPA 70E Standards, dated March 21, 2016. (Tr. 543; J. Ex. XII).

completed the Boston Safety Training course, entitled "Training for INFRA-RED Building and Power Service". (Tr. 54-55, 73-75; Ex. 9).

Tom McDonald testified that Infra-Red also provides "extensive[]" on-the-job training to new employees that includes instruction on the company's safety rules. (Tr. 246-47). He said that new employees are accompanied on jobs by "senior technicians" for "at least months" so "that they learn . . . the safety culture and work culture of the company." (Tr. 247). Bob McDonald similarly testified: "We send them out with experienced technicians . . . that, you know, train them, and basically they observe them for the most part." (Tr. 356). He agreed that this training included the selection and use of PPE, what tools to use, and safety rules. (Tr. 356-57). Lueck testified that he received this on-the-job training, stating that during his first few months he was accompanied on jobs by another employee who was "generally a senior tech in order to learn the ways in which they perform their work." (Tr. 95). He said that the senior technician would "walk me through . . . what they were doing . . . what the logic is behind the theory, and you know, point out any hazard and what we were doing, you know, on the job." (Tr. 95). He said he was instructed to use PPE whenever working with "anything that was potentially live," and taught that "anytime you go out to perform work, you got to look at the job and try to make an analysis on what it is that you're going to be doing . . . . and you know, accurately try to decipher what you should be doing when doing that work." (Tr. 99).

Tom McDonald testified that Infra-Red also "usually" has new employees take a 10-hour OSHA course covering general safety, as well as some electrical safety relating to electrical hazards. (Tr. 72-73, 245). Lueck testified that he took this training after starting at the company. (Tr. 71-72). Bob McDonald testified that when on-boarding new employees he also requires that they review and sign an employee handbook in his presence. He testified that he observed both

[redacted] and Lueck reviewing employee handbooks. (Tr. 338-40; J. Ex. I, at 0002, J. Ex. II, at 0028). Lueck confirmed that he reviewed the Employee Handbook II and had signed it to indicate he had done so in around January 2017.[29] (Tr. 87; J. Ex. II). Employee Handbook II instructs employees that they are "expected to use job risk/hazard analysis techniques to determine the correct PPE to meet OSHA and the NFPA standards." (Tr. 88-89; J. Ex. II, at 34; Resp't Br., at 49, ¶ 247).

DISCUSSION

Secretary's Burden of Proof

To establish a violation of an OSHA standard, the Secretary must show by a preponderance of the evidence that: (1) the cited standard applies; (2) the terms of the standard were violated; (3) one or more employees had access to the cited condition; and (4) the employer knew, or with the exercise of reasonable diligence could have known, of the violative condition. *Astra Pharm. Prods*., 9 BNA OSHC 2126, 2129 (No. 78-6247, 1981), *aff'd in relevant part,* 681 F.2d 69 (1st Cir. 1982).

I. Item 1 (training)

The Secretary alleges that Infra-Red violated 29 C.F.R. § 1910.332(b)(1), which requires employees who face a risk of electric shock that is not reduced to a safe level in a manner specified under the standard to "be trained in and familiar with the safety-related work practices required by 1910.331 through 1910.335 that pertain to their respective job assignments." More specifically, the Secretary alleges that Infra-Red violated this requirement by failing to train Lueck on the

[29] Bob McDonald testified that the version of the Employee Handbook that was in effect when Lueck was hired was Handbook II and appears at J. Ex. II. (Tr. 342-43).

safety-related work practices necessary to safely perform the battery replacement work at the Nantucket police station.[30] (Sec'y Br., at 8).

A. Applicability

The "Scope" section of the training provision, 29 C.F.R. § 1910.332(a), states that the "training requirements contained in this section apply to employees who face a risk of electric shock that is not reduced to a safe level by the electrical installation requirements of §§1910.303 through 1910.308," and adds, "NOTE: Employees in occupations listed in Table S-4 face such a risk and are required to be trained." Table S-4 includes "Electricians" in its list. Since Lueck was an electrician, the Secretary argues, the standard applies and required him to be trained on the safety-related work practices that pertained to the battery replacement work. (Sec'y Br., at 8).

Infra-Red agrees that Lueck was working as an "electrician" and does not dispute that the standard applies. (Resp't Br., at 29; 61-62). Although Infra-Red does contend that there was no legal requirement for the battery replacement work to be performed by a licensed electrician, it does not dispute that the work required electrical expertise and that Lueck was exposed to a risk of electric shock during it. (Resp't Br., at 44). Lueck acknowledged that there was such a risk at the hearing and stated that he wore PPE while putting the system in bypass, including a fire-resistant jacket, gloves, and helmet, for that reason—because he was "interacting with something that was live." (Tr. 41-42.) Since Lueck was an electrician, performing work in that capacity, and faced a risk of electric shock during the work, the Court finds that the training requirement

[30] The Secretary does not contend that Infra-Red failed to adequately train [redacted]. (Sec'y Br., at 11). *See Intercontinental Terminals Co*., No. 78-5523, 1980 WL 10125, at *13-14 (O.S.H.R.C.A.L.J., March 20, 1980) (The occurrence of an accident does not establish that an employee did not receive training.)

applies.[31] *See* 29 C.F.R. § 1910.332(a) Note (expressly stating that "[e]mployees in occupations listed in Table S-4 . . . are required to be trained.").

B. Whether Terms of Standard Were Violated

The cited training requirement, section 1910.332(b)(1), is located within a division of Subpart S (the "Electrical" standard) that is titled "SAFETY-RELATED WORK PRACTICES," and which consists of sections 1910.331 to 1910.335.[32] Section 1910.332, titled "Training," and subsection 1910.332(b), "*Contents of training*," sets forth three categories of required training: (1) "*Practices addressed in this standard*" (1910.332(b)(1)); (2) "*Additional requirements for unqualified persons*" (1910.332(b)(2)); and (3) "*Additional requirements for qualified persons*" (1910.332(b)(3)). The Secretary alleges that Infra-Red violated the first provision, section 1910.332(b)(1), which requires that employees "be trained in and familiar with the safety-related work practices required by §§1910.331 through 1910.335 that pertain to their respective job assignments." These sections set forth numerous safety-related work practice requirements.[33] The

[31] In addition to the scope provision (section 1910.332(a)) that specifically applies to the training requirement, an anterior provision, section 1910.331, sets forth the "Scope" of the entire "SAFETY-RELATED WORK PRACTICES" division (sections 1910.331 to 1910.335). Although neither party addresses this anterior scope section, the Court finds that Lueck's work was also covered by its applicability requirements. Section 1910.331(a) states, in part:

> The provisions of §§1910.331 through 1910.335 cover electrical safety-related work practices for both qualified persons . . . and unqualified persons . . . working on, near, or with the following installations:
>
> (1) *Premises wiring* . . . (2) *Wiring for connections to supply*. Installations of conductors that connect to the supply of electricity; (3) *Other wiring* . . . ; (4) *Optical fiber cable* . . . .

The UPSS battery replacement work involved connecting conductors to a supply of electricity (the batteries), and thus constituted "Wiring for connections to supply." (The standard does not define the terms "conductors" or "supply of electricity," so their plain meaning applies). Since Lueck was working on or near this wiring, his work is covered by this scope provision. As noted above, Infra-Red does not dispute that the standard applies.

[32] This division also includes sections 1910.336 to 1910.360, but those sections are presently reserved and lack content.

[33] All four of the Secretary's citation items allege violations of requirements falling within these sections.

Secretary does not allege that Infra-Red failed to provide the additional training required under sections 1910.332(b)(2), (b)(3).

The Secretary alleges that Infra-Red violated section 1910.332(b)(1) by failing to provide "any training" to Lueck before he performed the battery replacement work, and in particular, by failing to train him on how "to work with batteries,"[34] to "complete a job hazard analysis," and on how to "perform the UPSS bypass."[35] (Sec'y Br., at 8-9). Infra-Red's position is that it did not violate the training requirement because Lueck was "trained in and familiar with the safety-related work practices required to safely complete" the work that he performed on April 7, 2017. (Resp't Br., at 62).

Although the Secretary names three subjects that he contends Lueck needed training on—how to "work with batteries," to "complete a job hazard analysis," and how to "perform the UPSS bypass"—the Secretary does not explain why the cited provision would have required Infra-Red to train Lueck on these matters. Section 1910.332(b)(1) does not impose an open-ended obligation on employers to simply provide "training." As quoted above, it requires that employees be trained on "the safety-related work practices *required by 1910.331 through 1910.335 that pertain to their respective job assignments*." *(Id.)* (emphasis added). The Secretary does not say which of the many safety-related work practice requirements in sections 1910.331 through 1910.335 pertained to Lueck's assignment and that Infra-Red failed to adequately train him on. The Secretary does not name a single section that he is relying on as the basis for the alleged training violation. None

[34] Respondent asserts that the Secretary "fails to identify any more particularized electrical safety related training that would apply to changing batteries as opposed to working with other sources of live energy." (Resp't Br., at 13).
[35] Respondent asserts that "Complainant failed to identify what additional bypass procedures training should have been provided." (Resp't Br., at 14).

of these sections refer to "work[ing] with batteries," to "job hazard analys[es]," to "perform[ing] a UPSS bypass," or to similar topics.[36]

It is the Secretary's burden to prove that an employer violated the terms of a standard, and that burden includes pointing the Court to the specific requirements in a standard that the Secretary is alleging have been violated. The Secretary appears to be asking the Court to mine sections 1910.331 through 1910.335 on his behalf to find some plausible underlying regulatory basis for the alleged training deficiencies. The Court finds that it would be improper to undertake this task. Since the Secretary has failed to explain which (if any) of the numerous safety-related work practice requirements in sections 1910.331 through 1910.335 that he is alleging pertained to Lueck's work assignment and that Lueck was not trained on, the Secretary has failed to meet his burden to prove to the Court that Infra-Red violated the training provision.[37] The Secretary's failure here is akin to accusing an employer of failing to comply with Subpart S—Electrical by failing to take some given action (e.g., to require employees to wear safety goggles), without ever identifying the specific provision within Subpart S that would require that action.[38]

---

[36] Section 1910.333(a) imposes a general obligation to use "safety-related work practices" to "prevent electric shock or other injuries" when work is performed near equipment that may be energized, but the Secretary has not cited this open-ended duty as the basis for the alleged training violation or explained why it would require Infra-Red to train Lueck on the topics he names.

[37] Vanasse testified that [redacted] was trained on the safety related work practices required by sections 1910-331 through 1910-335. (Tr. 574; J. Ex. XVIII, at 0247-49).

[38] It is possible, though the Secretary does not assert this so this is mere speculation, that the Secretary is interpreting section 1910.332(b)(1) to mean that an employer is obligated not only to train employees on the safety-related work practices in sections 1910.331 to 1910.335 that pertain specifically to their work, but also to train them on any other pertinent safety-related work practices (even if not mentioned in those sections), such that the Secretary would not necessarily need to cite any of those sections to support his claim that section 1910.332(b)(1) required Infra-Red to train Lueck on how to work with batteries, perform the bypass, and to complete a JHA. Such an interpretation is contradicted by section 1910.332(b)(1)'s plain language. Section 1910.332(b)(1) states only that employees "shall be trained in the practices required by §§1910.331 through 1910.335 that pertain to their respective job assignments." The next provision, section 1910.332(b)(2), states that employees "who are not qualified persons" (as defined under the standard) "shall also be trained in and familiar with any electrically related safety practices not specifically addressed by §§1910.331 through 1910.335 but which are necessary for their safety." The Secretary has not alleged that Infra-Red violated this subsequent provision or claimed that Lueck was an unqualified person who would have been subject to its additional requirement that such persons be trained on "any electrically related safety practices" even those "not specifically addressed by §§1910.331 through 1910.335 . . . ."

To the extent the Secretary's position is that Infra-Red necessarily violated the provision by failing to provide *any* safety training to Lueck, this position is belied by the wording of the standard. The standard expressly states that an employer is only required to provide training on the safety-related work practices in sections 1910.331 to 1910.335 that pertain to the employee's work assignment. It therefore follows that if none of the safety-related practices would pertain to a particular job assignment (such as, in this case, changing the batteries), the employer would be under no obligation to train the employee on those practices (at least prior to that specific work assignment).[39] Again, it is the Secretary's burden to inform the Court which specific sections of a standard he is relying on as the basis for an employer's alleged violation. Failing to do so is by itself a failure of proof.

The Secretary alleges Infra-Red violated the standard when it failed to train Lueck before he performed electrical work at the Nantucket police station. Lueck testified that Infra-Red had not trained him to work with batteries before he began the battery work on April 7, 2017. (Tr. 53-54). Tom McDonald testified:

> Q. Let's talk about training. You know that Infra-Red did not train Mr. Lueck specifically on battery work before his work on the Nantucket Police Station, right?
>
> A. Yes, that's correct.

(Tr. 169-70; Exs. 9-10). Lueck said he was not trained to complete JHA forms. (Tr. 56). He further testified that Infra-Red had not trained him to perform the UPSS bypass before he

[39] It is possible that the Secretary intended to accuse Infra-Red of failing to train Lueck on the safety-related work practice requirements it alleges the company violated in Items 2-4 (i.e., sections 1910.333(a)(2) (other safety-related work practices), 1910.335(a)(1)(i) (PPE), and 1910.335(a)(2)(i) (insulated tool)), but the Secretary did not allege that Infra-Red violated the training requirement by failing to train Lueck on the practices required by these sections, and the Court finds that it would be improper to presume the Secretary's intent and fill in the missing allegations on his behalf.

performed the bypass at the job site.[40]

But, the record does not support the Secretary's claim that Infra-Red failed to provide any electrical safety training to Lueck.[41] Section 1910.332(c) states that "[t]he training required by [the training provision] shall be of the classroom or on-the-job type," and the "degree of training provided shall be determined by the risk to the employee." Several witnesses testified that Infra-Red has senior technicians train new employees on electrical safety (and other matters) on-the-job, and Lueck confirmed that he received this training during his first few months with the company. Tom McDonald, Infra-Red's president, testified that this on-the-job training of new employees by senior technicians is "extensive[ ]" and covers the company's safety rules. (Tr. 246-47). He said that new employees work with senior technicians for "at least months," with the amount of time depending on when "the feedback" is that the employee is working safely. (Tr. 248). Bob McDonald testified that the on-the-job training covers Infra-Red's safety policies and procedures, the performance of a job risk analysis, the selection and use of PPE, and what tools to use. (Tr. 356-57). Rega referred to the senior technicians who go on jobs with new employees as "the trainer," and when asked who she was referring to, explained: "The more senior technician . . . who is proficient themselves in the jobs we're training them on so they would advise them on proper procedure, safety, and that kind of stuff." (Tr. 429-31). She said that the newer technician will "go out with the trainer until the trainer tells me they're good to go on their own," and that the time period for this training varies because it "depends on the skill set they bring in," as "[s]ome

[40] Lueck acknowledged that Infra-Red gave him the UPSS Manual that provided a list of procedures, operating instructions and a description of its functions. (Tr. 54). He also said that Infra-Red had provided him with "a general course in construction safety and health." (Tr. 72).

[41] Multiple witnesses testified that Infra-Red requires that all electrical technicians attend an annual training on electrical safety provided by third-party Boston Safety Training. (Tr. 73-75, 224, 355, 438, 531-32; J. Ex. X). Lueck had only been working at Infra-Red for a few months at the time of the Nantucket police station UPSS job and had not yet attended this training; he participated in it afterward. This course included training on how to assess when there is some sort of a risk of an arc flash. (Tr. 73-78; J Ex. X, at 84).

of them have more experience than others." (Tr. 429, 431). She agreed that the trainers would go over the company's safety rules and policies during this on-the-job training. (Tr. 432).

Lueck described receiving this on-the-job training. (Tr. 94-96). He testified that he was required to work with a "senior tech" during his first few months at Infra-Red so that he could be taught how to perform the work: "They would walk me through . . . exactly, you know, what they were doing . . . and you know, point out any hazard and what we were doing, you know, on the job." (Tr. 95-96). He said that he was trained, for example, to use PPE whenever working with "anything that was potentially live": "They would say, 'Dan, put your suit on, get your suit on,' you know." (Tr. 96). He said he was also taught "that anytime you go out to perform work, you got to look at the job and try to make an analysis on what it is that you're going to be doing . . . and you know, accurately try to decipher what you should be doing when doing that work," such as what type of PPE should be worn. (Tr. 99).

In addition to this on-the-job training, the record reflects that Infra-Red also provided some more formal and classroom type safety training to Lueck. Just after starting at Infra-Red, he was put through a 10-hour OSHA course covering general construction safety, including electrical hazards. (Tr. 71-72). Upon being hired, Lueck was given the Employee Handbook II and required to review it and sign it in Bob McDonald's presence. (Tr. 87, 338-99; J. Ex. II). Lueck confirmed that he received and reviewed the Employee Handbook II and had signed it to indicate that he had done so.[42] (Tr. 87; J. Ex. II). Although the Employee Handbook II primarily covers general employment matters and not safety, it instructs employees that they "are expected to use job risk/hazard analysis techniques to determine the correct PPE to meet OSHA and the NFPA

[42] Lueck's signature does not appear at J. Ex. II.

standards." (Tr. 89; J. Ex. II, at 34). Thus, the Secretary's contention that Infra-Red violated the standard by failing to provide any safety training to Lueck is contradicted by the record.

In addition, even if the training provision were construed to impose an open-ended obligation on employers to provide any and all electrical safety-related training applicable to the work being performed—in other words, if it were permissible for the Secretary to cite the training provision without naming the underlying sections within the Safety-Related Work Practices division underlying the alleged training deficiency—he still would not have established that Lueck's training was deficient. "To establish noncompliance with a training standard," the Commission has held, "the Secretary must show that the cited employer failed to provide the instructions that a reasonably prudent employer would have given in the same circumstances." *N&N Contractors, Inc.*, 18 BNA OSHC 2121, 2125 (No. 96-0606, 2000), *aff'd,* 255 F.3d 122 (4th Cir. 2001); *see also Compass Envtl., Inc.*, 23 BNA OSHC 1132, 1134 (No. 06-1036, 2010), *aff'd,* 663 F.3d 1164, 1168 (10th Cir. 2011). As discussed above, the Secretary alleges that Infra-Red's training was deficient in that Lueck was not trained on "how to work batteries," to "perform a UPSS bypass," and to "complete a job hazard analysis."

With respect to working with batteries and performing the UPSS bypass, the Secretary has not shown that a reasonably prudent employer would have felt the need to give Lueck specialized training on these matters. As Infra-Red argues, the Secretary has not identified any "particularized electrical safety related training that would apply to changing batteries as opposed to working with other sources of live energy." (Resp't Reply, at 13). According to Infra-Red, the UPSS battery work did not need to be performed by an electrician, and both Lueck and [redacted] were overqualified to do it. (Resp't Reply, at 4). In addition to the on-the-job electrical safety training that Lueck received discussed above, the record reflects that Lueck, as a licensed journeyman

electrician, had undergone extensive electrical safety training prior to joining Infra-Red in January 2017. (Tr. 87). Lueck testified that he graduated from high school in 2011. From 2011 through 2015, he performed general electrical work at two electrical companies, Donovan Electric and CPCO. Lueck became a licensed journeyman electrician in about March 2016. This required him to complete 600 hours of electrical education and 8,000 hours of work under a journeyman electrician.[43] (Tr. 56, 65-71). Before being sent to the Nantucket UPSS job, Lueck was given the UPSS Manual, and he confirmed that he reviewed it prior to performing the work. (Tr. 102-04, 442).

Multiple witnesses described the task of disconnecting the old batteries and reconnecting the new ones as a straightforward process similar to changing a car battery. Lueck testified that disconnecting the batteries involved pulling off small cables ("jumpers") secured to posts on the batteries with bolts, and that reconnecting the new ones involved the reverse procedure: "so if you were to think of it as a car battery, you have two posts, two terminals on a car battery, and you land jumpers that feed the car . . . ." (Tr. 45-46, 111). Tom McDonald testified that "[c]hanging batteries is a simple task," explaining: "It's not a mechanical task other than connections that you're making. You're swapping them out. They fit exactly with the same connectors that came out." (Tr. 271). Bob McDonald testified that he was surprised when he found out [redacted] had been injured "because . . . the level of difficulty for the job wasn't real high." (Tr. 402). As for performing the UPSS bypass, Infra-Red notes that the procedure is set forth in the UPSS Manual that Lueck reviewed and consists of three simple steps: (1) pressing the "STOP" button; (2)

[43] Lueck obtained his 600 hours of electrical education, that included hand tool and general safety training, from a trade school, Gould Institute of Construction, based in Canton over a four-year period from 2011 through 2015. (Tr. 66-68). He also took a three month, two nights a week, prep course at the Leo Martin School to prepare for his journeyman electrician's examination. (Tr. 68). He received an Associate's degree in Applied Science from the Wentworth Institute in 2017. (Tr. 68-69).

rotating the switch to "TRANSFER"; and (3) then rotating the switch to "BYPASS." (Resp't Reply, at 6; Ex. E., at 42). The Secretary has pointed to no evidence to rebut Infra-Red's claim that the UPSS work was straightforward, and that Lueck was qualified to do it and did not need any additional specialized safety training to do it beyond what he underwent to become a licensed electrician and on-the-job during his first months at Infra-Red.

With respect to training to "complete a job hazard analysis," the Secretary has not proved that Lueck lacked such training.[44] The Secretary contends that page 56 of the hearing transcript establishes that "Infra-Red did not train Lueck to complete a job hazard analysis." (Sec'y Br., at 8). On that page, Lueck testified that he was not trained "on completing the job hazard analysis forms,"[45] but he did not testify that he was not trained to perform a JHA.[46] (Tr. 56). Lueck subsequently testified that he was trained to perform a JHA before starting work to determine what PPE is necessary. (Tr. 95-99). Specifically, he said that he was taught "that anytime you go out to perform work, you got to look at the job and try to make an analysis on what it is that you're going to be doing . . . and you know, accurately try to decipher what you should be doing when doing that work," such as what type of PPE should be worn.[47] (Tr. 99). This is consistent with 29 C.F.R. § 1910.132(d)(1) *Hazard assessment and equipment selection*, which states, in part, that

[44] The Secretary does not define the term "job hazard analysis" or state that he is using the term in any specialized or technical sense. The Court therefore construes the Secretary's use of the term literally, i.e., to broadly refer to conducting an analysis to determine the hazards associated with a given job.

[45] As discussed later, the Court finds Lueck neither completed a JHA form nor performed a JHA for the work done at the job site on April 7, 2017. (Tr. 173-79). However, an employee's failure to comply with a safety rule does not, by itself, establish a failure to train. *Dravo Eng'r and Constructors*, 11 BNA OSHC 2010, 2011-12 (No. 81-748, 1984).
[46] J. Ex. V is a copy of the JHA form, which is titled "INFRA-RED BUILDING AND POWER SERVICE, INC. Job Hazard Analysis Form."
[47] Lueck testified:
Q. And what, if any, type of on-the-job training did you receive from those more senior technicians regarding performing any kind of a job analysis on the jobs?
A. We have safety meetings before – preventive maintenance jobs. You know, anytime we go down to a shutdown – for instance – well, use Dave Major as a example; he's one of the senior techs. We'll get everybody together. They'll designate certain tasks and verbally will make an analysis of the dangers involved.
(Tr. 95-96).

"[t]he employer shall assess the workplace to determine if hazards are present, or are likely to be present, which necessitate the use of" PPE. Bob McDonald agreed that employees are trained to perform a "job risk analysis" on-the-job. (Tr. 356).

Vanasse testified that Infra-Red's employees were "trained in safety related work practices relative to the hazards that they faced." His expert report states, "[redacted] was trained in and familiar with the safety related work practices required by 1910.331-335 for the replacement of the battery system." (Tr. 599; J. Ex. XVIII, at 0247-48). Vanasse testified that Infra-Red employees were familiar with the safety related work practices required by sections 1910-331 through 1910-335 that pertained to their perspective job assignments. (Tr. 574-75). He also stated that "other safety related work practices" were utilized or available to protect employees who could be exposed to the electrical hazards involved.[48] Vanasse testified that an Infra-Red employee's failure to determine approach boundaries would be a failure to meet his safety-related work practice rule that he covers in the training he provides to Infra-Red employees.[49] (Tr. 574-75, 629). His expert report states that "Infra-Red has an administrative control in place through the application of a Job Hazard Analysis (JHA)- Exhibit H [Job Hazard Analysis]". He also said one of the important safety related work practices is doing a JHA. He agreed that Infra-Red required its employees to complete a written JHA before beginning work. (Tr. 630-34; J. Ex. XVIII, at 0249).

---

[48] Vanasse's Power Point training included "Objectives" relating to:

Safety related work practices

- Determine approach boundaries- Shock and Arc Flash
- Establishing an Electrically Safe Work Condition
- Energized Work Permit and use of special precautionary techniques and PPE.

(Tr. 629; J. Ex. X, at 0084); (emphasis in original).

[49] Vanasse said approach boundaries keep people at a distance to where they cannot get more than a second-degree burn. They exist for both arc flash and shock. It is also a trigger for workers to wear some arc-rated PPE. He said [redacted] should have been wearing at least "a 25-Cal system for arc flash protection." (Tr. 651-55, 660). Vanasse said that [redacted] was trained on and understood limited "approach boundaries." (Tr. 656-57; J. Ex. X, at 45-47).

Consistent with this testimony, Infra-Red's Employee Handbook II states that employees "are expected to use job risk/hazard analysis techniques to determine the correct PPE to meet OSHA and the NFPA standards." (Tr. 87, 99, 356; J. Ex. II, at 34). Lueck testified that he had in fact performed a JHA prior to starting the Nantucket UPSS work. (Tr. 65).

In summary, because (1) the Secretary failed to identify which of the safety-related practices in sections 1910.331 through 1910.335 pertained to the work and that Infra-Red failed to train Lueck on, or otherwise explain why the cited standard would require the company to train Lueck on the three subject matters the Secretary names; (2) the record contradicts the Secretary's claim that the company provided no training to Lueck on electrical safety-related work practices; (3) the Secretary did not show that a reasonably prudent employer would have given Lueck specialized training to perform the UPSS battery work or rebut Infra-Red's contention that Lueck was qualified to do it; and (4) the Secretary did not prove that the company failed to train Lueck to complete a JHA, the Court finds that the Secretary has failed to meet his burden of proving that Infra-Red violated the terms of section 1910.332(b)(1). Since the Secretary has not shown that the company violated the terms of the standard, the employee access and knowledge elements of the Secretary's prima facie case are moot.

II. Item 2 (other safety-related work practices)

The Secretary alleges that Infra-Red violated 29 C.F.R. § 1910.333(a)(2), which requires employers to use "other safety-related work practices" to protect employees working on or near live parts that cannot be deenergized, by failing to use such work practices "to safely complete the electrical work at the Nantucket police station." (Sec'y Br., at 11). More specifically, the Secretary alleges that Infra-Red's employees "failed to perform a job hazard analysis to become

familiar with the hazards associated with their work and the precautions to take to avoid harm." (*Id.*)

A. Applicability

The cited provision states that where "exposed live parts are not deenergized (i.e., for reasons of increased or additional hazards or infeasibility), other safety-related work practices shall be used to protect employees who may be exposed to the electrical hazards involved." 29 C.F.R. § 1910.333(a)(2). The Secretary contends that this requirement applies to the UPSS work because Lueck and [redacted] were working on energized equipment. (Sec'y Br., at 11). Infra-Red does not dispute that Lueck and [redacted] were exposed to live parts and that the standard applies. (Resp't Br., at 62-63). The record confirms that both employees were working on and near live parts that could not be deenergized due to infeasibility. Lueck testified that he and [redacted] were "interacting with something that was live." (Tr. 41-42.) Tom McDonald testified that batteries cannot be deenergized. (Tr. 248). Vanasse's expert report also states: "As the energy of the battery system cannot be removed due to the nature of batteries, the deenergization is infeasible." (J. Ex. XVIII, at 9). The Court finds that the standard applies.

B. Whether Terms of Standard Were Violated

The cited provision, section 1910.333(a)(2), is given context by section 1910.333(a)(1), which states in part: "Live parts to which an employee may be exposed shall be deenergized before the employee works on or near them, unless the employer can demonstrate that deenergizing introduces additional or increased hazards or is infeasible due to equipment design or operational limitations." Section 1910.333(a)(2) then states that if live parts are not deenergized for such reasons, as was the case with the UPSS battery replacement work, "other safety-related work

practices shall be used to protect employees who may be exposed to the electrical hazards involved," and continues:

> Such work practices shall protect employees against contact with energized circuit parts directly with any part of their body or indirectly through some other conductive object. The work practices that are used shall be suitable for the conditions under which the work is to be performed and for the voltage level of the exposed electric conductors or circuit parts. **Specific work practice requirements are detailed in paragraph (c) of this section.**

(emphasis added). Although the last sentence of section 1910.333(a)(2) states that specific work practices requirements are detailed in paragraph (c), it is not clear whether this sentence means that *all* of the potential work practices that an employer is obligated to use pursuant to section 1910.333(a)(2) (where suitable for the work conditions) are detailed in paragraph (c), or if it means that paragraph (c) details *some* (but not all) of such potential work practices. If the latter is the case, determining whether any given work practice would fall within section 1910.333(a)(2)'s broad, open-ended mandate would appear to require the adoption of some performance-based test, such as an examination of what a reasonable employer in the industry would have done under similar circumstances. Neither party addresses this issue nor cites to any Commission precedent applying the cited provision.

The Court does not need to resolve this question, however, because the Secretary contends that section "1910.333(c) articulates the specific work practices required under the standard," and then points to one of the practices enumerated in that section as the basis for the alleged violation.[50]

[50] Consistent with the Secretary's contention that paragraph (c) "articulates the specific work practices required," the preamble to the publication of the Safety-Related Work Practices division as a final rule states:

> The basic intent of § 1910.333 is to require employers to take one of three options to protect employees working on electric circuits and equipment: (1) Deenergize the equipment involved and lock out its disconnecting means (§ 1910.333(b)); or (2) deenergize the equipment and tag disconnecting means, if the employer can demonstrate that tagging is as safe as locking (§ 1910.333(b)); or (3) work the equipment energized if the employer can demonstrate that it is not feasible to deenergize it (**see** discussion of § 1910.333(a) for permissible applications of this option

(Sec'y Br., at 11). Although the citation only cites section 1910.333(a)(2) and does not mention any of the specific work practice requirements detailed in paragraph (c), in his Post-Hearing Brief, the Secretary for the first time alleges that Infra-Red specifically failed to implement the work practice requirement detailed in section 1910.333(c)(2), which states:

> Only qualified persons may work on electric circuit parts or equipment that have not been deenergized under the procedures of paragraph (b) of this section. Such persons shall be capable of working safely on energized circuits and shall be familiar with the proper use of special precautionary techniques, personal protective equipment, insulating and shielding materials, and insulated tools.

See (Sec'y Br., at 11 (citing section 1910.333(c)(2) as the basis for the alleged violation); Jt. Pre-Hr'g St, at 13-14 (not including section 1910.333(c)(2) in the list of relevant regulatory sections)). According to the Secretary, Infra-Red did not implement this requirement because Lueck and [redacted] "failed to perform a job hazard analysis to become familiar with the hazards associated with their work and the precautions to take to avoid harm." (Sec'y Br., at 11).

In response, Infra-Red argues that it would be unfair to allow the Secretary to rely on this alleged basis for Item 2 because the Secretary failed to disclose it in discovery. (Resp't Reply, at 1-2, n. 1). Infra-Red contends that it issued interrogatories to the Secretary "expressly requesting that Complainant state the basis for its contentions that Infra-Red had violated the OHSA [sic] regulations . . . including specifically identifying the acts or omission that it contended violated such regulations," and the Secretary "repeatedly responded only as follows: 'See the violation worksheets produced in the Secretary's responses to Respondent's document request.'" (Resp't Reply, at 1-2, n. 1). According to Infra-Red, the violation worksheet for Item 2 states only that

---

and § 1910.333(c) for precautions to be taken when work is performed on or near energized parts).

55 Fed. Reg. 31,984, 32,000 (Aug. 6, 1990) (to be codified at 29 C.F.R. Part 1910) (emphasis added). The preamble thus specifically instructs readers to examine paragraph (c) to determine what other safety-related work practices to use when working on energized parts.

"other safety-related work practices were not used" and "[t]hese practices would include extensive PPE and insulated tools." (*Id.,* at 2 n. 1). Infra-Red also contends that it complied with the work practice requirement detailed in section 1910.333(c)(2) because both Lueck and [redacted] were qualified to perform the work and familiar with everything set forth in the newly cited provision. (Resp't Br., at 63). In addition, it contends that Lueck and [redacted] both did perform a JHA prior to beginning any work. (Resp't Reply, at 7).

To determine whether the Secretary proved that the terms of the cited standard were violated, the Court will address the following issues in succession: (1) the threshold question of whether the Secretary can rely on section 1910.333(c)(2) and an alleged failure to perform a JHA as the basis for Item 2 if that was not previously disclosed; (2) if so, whether a failure to perform a JHA would constitute a violation of the terms of section 1910.333(c)(2); and (3) if so, whether the Secretary established that Lueck and [redacted] in fact failed to perform a JHA.

1. Whether the Secretary Can Rely on New Legal and Factual Allegations Not Previously Pled or Disclosed in Discovery

The Court construes Infra-Red's unfairness argument as a claim that it received insufficient notice of the nature of the alleged violation and its ability to defend itself was thereby prejudiced.[51] Section 9(a) of the OSH Act, 29 U.S.C. § 659(a), requires that a citation "describe with particularity the nature of the violation, including reference to the provision of the Act, standard, rule, regulation, or order alleged to have been violated." In addition, Commission Rule 34(a)(2) requires the Secretary's complaint to "set forth all alleged violations" and to state "with particularity" the "circumstances of each such alleged violation." 29 C.F.R. § 2200.34(a)(2). The particularity requirement in Section 9(a) of the Act does not require "minute detail," but it requires

[51] Infra-Red does not cite any legal authority or legal principle to support its position that the Court should disallow that Secretary from relying on newly alleged facts and law.

that the employer be given "fair notice of the nature of the alleged violation." *Meadows Indus., Inc.*, 7 BNA OSHC 1709, 1710-11 (No. 76-1463, 1979). To provide fair notice, the citation "must be drafted with sufficient particularity to inform the employer of what he did wrong, *i.e.*, to apprise reasonably the employer of the issues in controversy." *Brock v. Dow Chem.*, 801 F.2d 926, 930 (7th Cir. 1986). Since a "[l]ack of particularity in a citation may be cured at the hearing," the Court must determine whether insufficient detail in the citation actually prejudiced the employer. *Meadows*, 7 BNA OSHC at 1710-11.

The citation simply paraphrases section 1910.333(a)(2)'s broad requirement that "other safety-related practices" be used, and does not name any specific safety-related practices that Infra-Red failed to use or provide any other factual description of the circumstances of the alleged violation other than the location and date. It does not mention the specific work practice provision that the Secretary now asserts is the basis for the violation—section 1910.333(c)(2)—or allege that the company failed to perform a "job hazard analysis." Nor did the Secretary provide such allegations in the Complaint, Joint Pre-Hearing Statement, or in any other filing prior to his Post-Hearing Brief. The Secretary also has not disputed Infra-Red's claim that he failed to provide these allegations to the company in response to its interrogatories expressly requesting such information. Commission Rule 55(b) states: "All answers [to interrogatories] shall be made in good faith and as completely as the answering party's information will permit." 29 C.F.R. § 2200.55(b); *see also Meadows*, 7 BNA OSHC at 1710-11 (noting that "available discovery procedures enable a respondent to obtain sufficient additional information about the alleged violations to remedy any lack of particularity in the citation and complaint.").

Although the Secretary failed to provide Infra-Red with reasonable notice of the underlying factual and legal basis for Item 2, the Court finds that Infra-Red was not prejudiced by this failure

because the parties actually litigated the factual question of whether a JHA was performed during the hearing, and Infra-Red had an opportunity to solicit testimony on this issue. After the Secretary's counsel asked Lueck whether he or [redacted] had completed one of Infra-Red's JHA forms on direct examination, Infra-Red's counsel asked Lueck multiple times on cross-examination whether he had completed a JHA. (Tr. 89, 105-06, 116-17, 124). He asked Lueck, for example, "Is it fair to say that even if you had not completed the [JHA] form, that you, in fact, had performed a risk assessment before doing any work in Nantucket both on the first and the second occasion?" (Tr. 116-17). Lueck replied, "Yes." (Tr. 105, 116-17). Infra-Red was also allowed to file a reply brief, and thus was also given an opportunity to provide legal argument in opposition to the Secretary's claim that a failure to perform a JHA constitutes a violation of the terms of the provision cited for the first time in the Secretary's Post-Hearing Brief (section 1910.333(c)(2)).

2. Whether a Failure to Perform a Job Hazard Analysis Constitutes a Violation of the Terms of the Cited Standard

The Secretary does not explain why section 1910.333(c)(2)'s requirement that employees be familiar with precautionary techniques, PPE, etc., would impose an obligation on employees to perform a "job hazard analysis." As quoted above, the provision's plain language states only that employees must be "capable" and "familiar" with certain safety measures such as PPE and insulated tools; it says nothing about employees needing to perform a "job hazard analysis" prior to beginning work. The Secretary asserts that Infra-Red's safety manual requires each employee "to complete and document a job hazard analysis before beginning work."[52] (J. Ex. III, at 0055).

[52] Vanasse also testified that "[p]ror to doing work that would expose an individual to the risks of the electrical hazard, a risk assessment shall be performed which shall include what their exposure to arc flash levels would be and/or their shock hazard." (Tr. 565; J. Ex. X, at 0170).

Infra-Red does not disagree. (Resp't Br., at 35, ¶ 100d). Infra-Red's Company Safety Program states:

> **Job Hazard Analysis** (emphasis in original)
>
> Each employee is required to complete a Job Hazard Analysis before beginning work on any job and turn this into the Infra-Red Building & Power Service office for filing in the job folder. The employee should perform a visual and physical inspection of the work area. This ensures each employee pays attention to the potential hazards they may face when performing the functions of their assigned work.

(Tr. 630-35; J. Ex. III at 0055; Sec'y Br., at 11). Vanasse testified that there were no exceptions to the requirement that each employee complete a JHA in the Company's Safety Program for any job. He never was provided with any JHA completed by either Lueck or [redacted]. He testified that by not doing so [redacted] and Lueck violated the Company's Safety Program. (Tr. 635-36; J. Ex. III).

As Infra-Red points out, however, the Secretary is required to prove the company violated the terms of the cited standard, not that the company violated its own safety rules. What the company's own rules happen to require is of unclear relevance.[53] The Secretary also references "NFPA 70E - Standard for Electrical Safety in the Workplace" (NFPA 70E) and quotes it as stating that "[a]ppropriate safety related work practices shall be determined before any person is exposed to the electrical hazards involved by using both shock risk assessment and arc flash risk assessment." (Tr. 638-40; Ex. 17; Sec'y Br., at 12). NFPA 70E is an electrical safety consensus standard published by the National Fire Protection Association, a private industry group.[54] (Tr.

[53] An employer of course may choose to adopt safety rules beyond the requirements of OSHA standards and should not be discouraged from doing so. Vanasse testified that Infra-Red's policy requiring the completion of a written JHA is a "Best Practice" not required by OSHA standards. (Tr. 659).

[54] "NFPA© codes, standards, recommended practices, and guides (NFPA Standards) … are developed through a consensus standards development process approved by the American National Standards Institute." (Ex. 17, at 2). NFPA 70E states: "Users of NFPA Standards should consult applicable federal, state, and local laws and regulations. NFPA does not, by the publication of its codes, standards, recommended practices, and guides, intend to urge action that is not in compliance with applicable laws, and these documents may not be construed as doing so." (Ex. 17, at 3).

614-15; Ex. 17). Vanasse testified that Infra-Red expected its employees to meet the standards of NFPA 70E. (Tr. 615). He agreed that NFPA 70E requires workers to do a JHA before beginning work. (Tr. 636; Ex. 17, at 28-30, 54). The Secretary also does not explain why the existence of this industry standard has any relevance to this case. The Secretary has the burden of proving that Infra-Red violated the cited OSHA standard, not this private industry standard. Finally, the Secretary cites Vanasse's testimony agreeing that a failure to "determine an approach boundary" would be an "electrical safety work practice violation in [his] understanding of the term." (Sec'y Br., at 13 (quoting Tr. 629)). Again, the Secretary does not explain the relevance of this evidence. Vanasse did not say what he meant when he agreed that this would be a "violation," and it is not clear if he was referring to a violation of OSHA rules, a violation of NFPA rules, a violation of his own best practice recommendations as an electrical safety instructor, or something else. Even if he were referring to this as an OSHA violation, Vanasse was not qualified to testify as an expert on OSHA law and the Court sustained the Secretary's own express objection to Vanasse being permitted to testify as to his opinions regarding whether Infra-Red violated the cited standards.[55] (Tr. 571-73, 589-92).

The company's own rules, the NFPA standards, and other evidence of common industry practice such as Vanasse's opinions, could be relevant to determining what "special precautionary techniques" a reasonable employer in the industry would ensure its employees are familiar with and capable of performing in order to comply with the standard. But even if a "job hazard analysis" is one of these special precautionary techniques contemplated by the standard, the Secretary does not claim that Lueck and [redacted] were unfamiliar with that technique or uncapable of performing it; the Secretary instead alleges only that they did not in fact implement it. The

[55] As the Secretary correctly stated at the hearing, "Violation[s] of applicable standards are legal conclusions," and Vanasse was not "qualified to analyze the regulations and reach conclusions on legal issues." (Tr. 572).

Secretary does not explain why an alleged failure to use any given precautionary technique would violate a provision that by its terms merely requires employees to be familiar with such techniques.

Although there appears to be no Commission precedent applying section 1910.333(c)(2), the Court finds that the Secretary's claim that the provision requires employees to perform an undefined "job hazard analysis" is unsupported by the provision's plain language. The first sentence in section 1910.333(c)(2) states: "Only qualified persons may work on electric circuit parts or equipment that have not been deenergized under the procedures of paragraph (b) of this section." The standard defines a "qualified person" as "[o]ne who has received the training in and has demonstrated skills and knowledge in the construction and operation of electric equipment and installations and the hazards involved." 29 C.F.R. § 1910.399. The first sentence thus prohibits untrained employees lacking adequate knowledge from working on energized equipment; it says nothing, however, about what particular techniques someone who *is* qualified must use when doing so (or whether a "job hazard analysis" is one of those techniques).

The second sentence in section 1910.333(c)(2) states: "Such persons shall be capable of working safely on energized circuits and shall be familiar with the proper use of special precautionary techniques, personal protective equipment, insulating and shielding materials, and insulated tools." This sentence reiterates that the employees must be "capable" and specifies certain matters that the employees must be "familiar with," i.e., have knowledge of, prior to working on energized equipment. The Secretary asserts in a conclusory manner, without explanation, that this provision obligates employees to "familiarize themselves with the hazards at the worksite by completing and documenting a job hazard analysis." (Sec'y Br., at 13). The Secretary appears to be inventing this requirement out of whole cloth, however, because it finds

no support in the words of the provision itself.[56] The provision's plain language states only that employees must be *familiar* with special precautionary techniques, protective equipment, insulating materials, and insulating tools; it says nothing about whether and when an employee must actually put such techniques or equipment to use. As noted above, even if conducting a JHA is one of the "special precautionary techniques" contemplated by the provision (which the Secretary has not claimed), the provision states only that employees are required to be familiar with such techniques and capable of implementing them, not that they must use them in every job no matter the circumstances.

In conclusion, the Secretary has not alleged that Infra-Red violated the provision because Lueck and [redacted] were unfamiliar with JHA techniques and uncapable of implementing them, and has pointed to no evidence to support such a claim;[57] instead, the Secretary only attempts to point to evidence that they did not in fact perform a JHA prior to the Nantucket police work. The Secretary therefore has not established that Infra-Red violated the terms of section 1910.333(c)(2) or, in turn, section 1910.333(a)(2).

3. Whether Infra-Red's Employees Performed a Job Hazard Analysis

Although section 1910.333(c)(2) does not require employees to perform a JHA, and the Secretary therefore has not established a violation, the Court will still address the factual question of whether Lueck and [redacted] performed a JHA. In support of his claim that Lueck and [redacted] failed to perform a JHA, the Secretary cites the following passage of Lueck's testimony:

> Q. Okay. So before beginning work on April 7th, did you do a job hazard analysis?

---

[56] *See Stewart Elec. Co.* 24 BNA OSHC 2098, 2101, 2104 (No. 13-0850, 2014) (ALJ) (finding that "[a]n arc flash hazard analysis is not required by OSHA" where "[t]he Secretary concedes that there is no requirement in the OSHA standards for an employer to perform an arc hazard analysis."). (Resp't Br., at 63-64, ¶ 25).

[57] The Secretary alleges that Infra-Red violated the training provision (Item 1) by failing to train Lueck to perform a JHA but does not rely on that allegation as a basis for the alleged violation of sections 1910.333(c)(2) and 1910.333(a)(2) (Item 2). *See* (Sec'y Br., at 11-15).

A. No.
Q. Do you know if Mr. [redacted] did – let me re-ask that question. Did Mr. [redacted] do a job hazard analysis on April 7th?
A. No, not to my knowledge.

(Sec'y Br., at 12 (quoting Tr. 48)). The Secretary also cites Lueck's testimony that neither he nor [redacted] performed a "shock risk assessment," an "arc flash risk assessment," or a "battery risk assessment" before beginning work on April 7, or determined the voltage they would be exposed to, the "boundary requirements," or the "arc flash boundary." (Tr. 56-57, 639-43; Ex. 17, at 28-30, 54; Sec'y Br., at 12-13).

In response, Infra-Red argues that in the passage quoted by the Secretary above, Lueck was testifying only that he and [redacted] had not completed a JHA form, not that they had not in fact analyzed the hazards associated with the work. (Resp't Reply, at 7). Infra-Red contends that Lueck "expressly testified that both he and [redacted] performed a JHA before beginning any work." [58] (Tr. 89; Resp't Reply, at 7).

Without question, neither Lueck nor [redacted] completed one of Infra-Red's JHA forms on April 7, 2017. (Tr. 89; Ex. 5). The Secretary's counsel showed Lueck Exhibit 5; and asked him if he had seen it before and if he knew what it was. (Tr. 42-43; Ex. 5). Lueck replied that he had and said that it was a "[j]ob hazard analysis form." (Tr. 42-43). Counsel then asked, "On your initial visit to the Nantucket police station . . . did you complete a job hazard analysis?" (Tr. 43). Lueck replied, "Nope." (Tr. 43). On cross-examination, Lueck said that he only meant that he had not completed the form, not that he did not complete a JHA at all. When asked, "Is it fair to say that even if you had not completed the [JHA] form, that you, in fact, had performed a risk assessment before doing any work in Nantucket both on the first and the second occasion?" he

[58] Employee Handbook II states: "Employees are expected to use job risk/hazard analysis techniques to determine correct PPE to meet OSHA and the NFPA standards." (J. Ex. II, at 0034).

replied, "Yes." (Tr. 89; 116-17). Lueck testified that he and [redacted] discussed the work they would be performing throughout their drive from the ferry station to the police station, which took 20 to 30 minutes.[59] (Tr. 105-06, 123). He said they performed an assessment and analysis of the risks involved in the work, and that he determined that he needed to wear his PPE suit.[60] (Tr. 124).

Tom McDonald testified that the purpose of performing a JHA was to identify the hazards and decide upon what PPE to wear. Lueck's account of his 20 minute discussion with [redacted] while driving to the job site did not disclose any specifics regarding the types of hazards they identified and precisely what PPE they needed to wear.[61] The JHA Form called for Yes or No and other entries under "Electrical/Live Work" for: 1) Shock Hazard, 2) Arc (Sticker rating), 3) Arc Blast, 4) Potential of Energized Parts, and 5) Trouble shoot/Anticipate unexpected events. The JHA Form also called for Yes or No entries under "Environment" for: 1) Noise, 2) Extreme Temperature, 3) Falling Objects, and 4) Visibility. The JHA Form also called for entries for "PPE worn", "Other preventative actions taken" and a "Fault Current Calculation". The JHA Form also called for the technician to sign the JHA Form. (Ex. 5). Lueck's testimony reflects that these topics were not adequately discussed as part of a JHA by Lueck and [redacted] before they started working at the job site on April 7, 2017. Also, [redacted] failed to wear any PPE while working at the job site on April 7, 2017 despite the requirement to identify any required PPE as part of a JHA. [redacted]'s failure to wear any PPE suggests a JHA was not performed prior to work being

[59] Lueck testified that he understood that he had a responsibility to determine what the correct PPE would be to use based upon Infra-Red's Employee Handbook II and on-the-job training he had received at Infra-Red prior to April 7, 2017. (Tr. 89; J. Ex. II, at 34).

[60] Tom McDonald testified that Infra-Red trained its employees annually on the need to complete a JHA before beginning work. He said its employees needed to analyze any hazards they may be exposed to and select the proper PPE. He further testified that Infra-Red's safety program stated: "Each employee is required to complete the job hazard analysis before beginning work on any job and turn this into the Infra-Red Building and Power Services office for filing in the job folder." Tom McDonald stated that the JHA must be documented. He agreed that neither Lueck nor [redacted] completed a JHA form before beginning work on April 7, 2017. He said their failure to complete the form was a violation of Infra-Red's safety program. (Tr. 173-79).

[61] [redacted] did not testify at the hearing.

started. The Court finds Lueck's testimony that both he and [redacted] had done a JHA before starting work on April 7, 2017 to not be persuasive. The Court find Lueck's testimony in this respect to not be credible. Furthermore, when a document is required by day-to-day practice to show that an event has been done; the absence of any such document calls for a finding that the event was not done. The absence of a record of an event that would ordinarily be documented is probative of the fact that the event did not occur. *U.S. ex rel. Compton v. Midwest Specialties, Inc.,* No. 96-4374, 1998 WL 30811, at *7, n. 6 (6th Cir. Jan. 22, 1998) (unpublished). There is no documentation in the record that shows either Lueck or [redacted] completed a JHA or JHA form. Accordingly, in view of the above, the Court finds that neither Lueck nor [redacted] performed an actual JHA prior to starting work on April 7, 2017 at the job site.

In conclusion, although the Court finds that Infra-Red's employees did not perform a JHA, because the Secretary's contention that the provision he cites for the first time in his Post-Hearing Brief requires employees to perform a JHA before every job is inconsistent with the plain language of that provision; the Court finds that the Secretary has not proved that the company violated the terms of section 1910.333(c)(2) or, as a result, section 1910.333(a)(2). Since the Secretary has not shown that the company violated the terms of the standard, the knowledge and employee exposure elements of the Secretary's prima facie case are moot.

III. Item 3 (PPE)

The Secretary alleges that Infra-Red violated 29 C.F.R. § 1910.335(a)(1)(i), which requires employees working in areas with potential electrical hazards to use electrical PPE. According to the Secretary, Infra-Red violated this requirement because neither Lueck nor [redacted] wore any PPE while disconnecting the batteries, [redacted] wore no PPE when connecting the new

batteries,[62] and Lueck did not wear arc-rated pants while bypassing the UPSS on both his initial visit and return April 7, 2017 visit. (Tr. 41-42, 61-62, 130; Sec'y Br., at 16).

A. Applicability

The standard states that it applies to "[e]mployees working in areas where there are potential electrical hazards." 29 C.F.R. § 1910.335(a)(1)(i). The Secretary states that the standard applies because both Lueck and [redacted] were working in areas where there were electrical hazards. Infra-Red does not dispute that both employees worked in areas with potential electrical hazards and that the standard applies. (Resp't Br., at 63-64; Resp't Reply, at 22-25). Lueck acknowledged that he was "interacting with something that was live" when performing the bypass work and he wore some PPE for that reason. (Tr. 41). The fact that [redacted] was injured by an arc flash when connecting the batteries also provides evidence that they were working in an area with potential electrical hazards. The Court finds that the standard therefore applies.

B. Whether Terms of Standard Were Violated

The standard requires employees to be provided with, and use, electrical PPE that is "appropriate for the specific parts of the body to be protected and for the work to be performed." 29 C.F.R. § 1910.335(a)(1)(i). As stated above, the Secretary contends that Infra-Red violated this requirement because Lueck and [redacted] failed to wear any PPE when disconnecting the old batteries and reconnecting the new ones, and Lueck failed to wear arc-rated pants when performing the UPSS bypass on both visits. (Sec'y Br., at 16). Infra-Red agrees [redacted] did not wear any PPE while working at the job site on April 7, 2017. It also agrees [redacted] should have been

[62] Lueck testified that [redacted] had a PPE suit in the back of his truck on April 7, 2017 at the job site. He said [redacted] was not wearing a PPE suit when working at the job site on that date. He offered to allow [redacted] to wear his [Lueck's] PPE suit because Lueck's PPE suit was in the room where [redacted] was working. Lueck did not tell [redacted] that [redacted] needed to wear the PPE suit. Lueck stated that "I'm sure I should have told him [[redacted]] to put his PPE on." (Tr. 62-63, 129-30).

wearing PPE at that time, and that it was unsafe for him not to do so.[63] (Tr. 198, 660; Resp't Br., at 2, 18). Vanasse's expert report concluded that [redacted] received an injury as "a direct result of his choice not to wear his PPE which he had brought with him." (J. Ex. XVIII, at 0246). Vanasse's Expert report states:

> Summary Statement Item 2:
>
> As the energy of the battery system cannot be removed due to the nature of batteries, the deenergization is infeasible and therefore the work had to be performed energized requiring the implementation of "other safety related work practices" as the referenced training outlined. These work practices should have included the use of insulated tools and personal protective equipment (PPE). Specifically, while the employee used an insulated tool, an insulated socket and driver assembly should have been used to disconnect / reconnect the battery system. Voltage rated gloves (class 0 rated to 1000V) with leather protectors should have been worn to protect the employee as the hazards of shock and thermal burn / arc flash could not be eliminated, nor the hazard engineered out, the worker substituted for. Additional PPE including safety glasses, hearing protection, class E or G hardhat, face shield and Arc rated system should also have been worn. Infra-Red provided all of the required material / tools / PPE to the employee. It is my opinion based on the task and equipment construction, the incident could have been prevented with the use of the appropriate insulated tool (insulated socket and insulated driver). Infra-Red provided the training in all the work methods required [sic] perform this task without incident, as well as Infra-Red supplying all the required PPE and tools to do so.

(J. Ex. XVIII, at 0251).

Vanasse also testified: "My conclusion was that if the personal protective equipment that was provided was utilized, it would have prevented his injury." (Tr. 605). He further testified that "[t]he lack of any type of voltage-rated glove and/or leather protector caused the direct injury to his hand. Had he worn his voltage-rated glove and leather protector, he would not have sustained the injuries to his hand from the arcing event, regardless of the tool that was utilized at that time." (Tr. 655-56). Infra-Red does not dispute that [redacted]'s failure to wear PPE during the disconnection and reconnection work violated the terms of the standard but argues that the

[63] Tom McDonald said that if he had been at the job site, he would have stopped [redacted] from working and probably completed the work himself if [redacted] had no PPE. (Tr. 198).

Secretary did not prove it had knowledge of this violative conduct or that Lueck participated in that work. Regarding Lueck's failure to wear arc-rated pants when performing the UPSS bypasses, Infra-Red argues that the Secretary did not prove that the PPE Lueck wore was insufficient.

To determine whether the Secretary established the terms of the standard were violated, the Court will address the following issues in succession: (1) whether [redacted]'s failure to wear PPE during the disconnection and reconnection work violated the standard; (2) whether Lueck participated in the disconnection work while not wearing PPE; and (3) whether Lueck's failure to wear arc-rated pants during the UPSS bypasses violated the standard. The Court will then separately address the knowledge and employee access elements of the Secretary's prima facie case.

1. Whether [redacted]'s Failure to Wear PPE During the Disconnection and Reconnection Work Violated the Terms of the Standard

Infra-Red does not dispute that [redacted] wore no PPE during the battery disconnection and reconnection work. (Resp't Reply, at 23-24). The record establishes that [redacted] was exposed to electrical hazards during this work, such as the risk of an arc flash, and that appropriate PPE would have helped protect him against such hazards. [redacted] burned his hand as a result of an arc flash. (Tr. 51-52; Ex. 12). Vanasse testified that disconnecting the batteries involved "working within the arc flash boundary," and that [redacted] would not have injured his hand if he had been wearing his voltage-rated gloves and leather protector. Infra-Red does not dispute this. (Tr. 654-56; Resp't Br., at 18). Since appropriate PPE thus could have protected [redacted] from the electrical hazard he was exposed to, the Court finds that that his failure to wear PPE violated the terms of the standard.

2. Whether Lueck Participated in the Disconnection Work

Although Infra-Red admits [redacted] performed the disconnection and reconnection work without PPE, it contends that the Secretary did not prove that Lueck performed this work. (Resp't Reply, at 23). The Secretary alleges that Lueck assisted [redacted] with disconnecting the batteries. When Lueck was asked who disconnected the batteries, he replied, "I really can't remember."[64] (Tr. 129). Earlier in his testimony, however, he appeared to testify differently. When asked to discuss his and [redacted]'s work assignments, Lueck stated:

> Well, I had been reading the manual on the UPSS. So I transferred the UPSS, and then we talked about the work that needed to be performed to remove the batteries. So together we removed the batteries because they were heavy, so it was a two-man job.

(Tr. 44-45). He was then asked, "When you were removing batteries, were you disconnecting them?" and he replied, "Yes." (Tr. 45). Infra-Red contends that Lueck was answering this question "collectively and not individually." (Resp't Reply, at 24, n. 8). Although this is plausible, Lueck was then asked, "Were you wearing PPE at the time that you disconnected the batteries?" and he replied, "I was not." (Tr. 45). Since he referred specifically to himself in this answer ("I was not"), it appears he understood the "you" in this question as referring to himself rather than collectively to him and [redacted]. Later on during re-direct testimony, Lueck acknowledged that he was not wearing PPE when moving the batteries. He agreed that he should have been wearing PPE when carrying the batteries after they were disconnected. (Tr. 144-45).

The Court finds that Lueck helped [redacted] disconnect the batteries and did not wear PPE while doing so. As quoted above, Lueck was directly asked whether he was wearing PPE while disconnecting the batteries, and he replied simply, "I was not." (Tr. 45). He did not respond by saying that he was not personally involved in disconnecting the batteries and therefore would not

[64] Regarding reconnecting the new batteries, Lueck recalled: "[[redacted]] was connecting the new batteries . . . I was not doing that work." (Tr. 130).

have needed to wear PPE in the first place or provide any other clarification. It is true that when later pressed on cross-examination if he recalled "who actually performed that disconnecting, whether it was you, whether it was , or whether it was both," he replied, "I really can't remember." (Tr. 129). The Court finds this response to be evasive and not credible. Lueck's initial recollection, as reflected in his earlier response, was that he *was* involved in the disconnection work. His initial response is also consistent with his testimony that "we should have been wearing our [PPE] suits the entire time," including while carrying the batteries. (Tr. 47, 144-45). The Court finds that Lueck's initial, unqualified recollection that he performed the disconnection work indicates that it is more likely than not the case that he was involved in the work.

3. Whether Lueck's Failure to Wear Arc-Rated Pants During the Bypasses Violated the Terms of the Standard

Infra-Red acknowledges that Lueck did not wear his arc-rated pants when he performed the UPSS bypass on both visits. (Resp't Reply, at 23). Lueck testified that he brought his "43 Cal suit" on both visits, which he described as "a very thick material that's supposed to be fire resistant . . . and it covers your body from head to toe." (Tr. 41). He said that the suit consists of a jacket, overalls, a helmet, and gloves. (Tr. 42). Although he testified that he wore his helmet, gloves, and jacket while performing the bypass during both visits, he admitted that he did not wear his arc-rated pants on either occasion, stating: "I think because I was kneeling on the floor in front of it, I felt protected, but obviously that's not the correct way to wear your PPE." (Tr. 42, 60).

Infra-Red argues that there is no evidence that it was necessary for Lueck to wear his PPE pants, pointing to Lueck's testimony that he "felt protected" since he was kneeling during the work. (Resp't Reply, at 23 (citing Tr. 42)). Although Lueck testified that he "was supposed to wear it all," Infra-Red contends that he meant only that the company's own work rules required him to do so or that it was his own opinion (citing his statement that, "we're told from the day one

we get the suit to wear the suit"). Lueck testified that during on-the-job training, he was always told to "suit up" when turning something on or off or working with anything live. (Tr. 62-63, 96-98; Resp't Reply, at 23 (citing Tr. 61, 129)).

The standard requires PPE to be used that is "appropriate" for the parts of the body that need protection and for "the work to be performed."[65] 29 C.F.R. § 335(a)(1)(i). The Secretary does not explain why arc-rated pants were "appropriate" for the UPSS bypass, or point to any evidence that such pants were necessary to protect Lueck, other than quoting Lueck's statement that only wearing the other parts of his suit was not "the correct way" to wear it "[b]ecause you're supposed to wear it all." (Sec'y Br., at 16 (quoting Tr. 42)). Nevertheless, the Court finds that the record establishes that arc-rated pants were appropriate for the work and necessary to fully protect Lueck. Lueck testified that failing to wear the pants was "obviously" not the "correct way" to wear his PPE. (Tr. 42). Although he may, as Infra-Red argues, have meant that it was not correct under the company's own rules, that would still provide evidence that it is appropriate and necessary to do so to be fully protected. In addition, Lueck later made clear in his testimony that he believed wearing the full PPE suit was something that he should have done to protect himself, not just to comply with Infra-Red's rules. When asked why he said it was his duty to wear his PPE, he replied: "It's clear that we're dealing with some sort of live voltage, and it's up to us to protect ourselves from the hazards that we face."[66] (Tr. 129). He said that this "duty" was to

[65] 29 C.F.R. § 1910.335(a)(1)(i) also includes a NOTE that states: "Personal protective equipment requirements are contained in subpart I of this part." Section 1910.132(a) of Subpart I states:

> (a) *Application* Protective equipment, including personal equipment for eyes, face, head, and extremities, protective clothing, respiratory devices, and protective shields and barriers, shall be provided, used, and maintained in a sanitary and reliable condition wherever it is necessary by reason of hazards of processes or environment, chemical hazards, radio-logical hazards, or mechanical irritants encountered in a manner capable of causing injury or impairment in the function of any part of the body through absorption, inhalation or physical contact.

[66] Lueck also admitted that the UPSS Manual instructs technicians to "[w]ear rubber gloves and boots" as PPE when working on batteries. (Tr. 109, 279; Ex. E, at 0035).

"[o]ur persons," "[o]urselves," and that "even if it wasn't [an Infra-Red rule], I would make it a rule for myself to put my suit on."[67] (Tr. 129). The Court therefore finds that Lueck violated the terms of the standard by failing to wear his arc-rated pants during the UPSS bypasses. The Court further finds that Lueck was exposed to electrical hazards that existed at the job site.

C. Knowledge

The Secretary must prove that the employer knew, or with the exercise of reasonable diligence could have known, of the violative condition. *Astra Pharm. Prods*., 9 BNA OSHC at 2129. A supervisor's knowledge of a violative condition is imputed to the employer. *Dover Elevator Co.*, 16 BNA OSHC 1281, 1286 (No. 91-862, 1993). The Secretary contends that Infra-Red had actual knowledge through its onsite supervisor, Lueck, or "in the alternative," had constructive knowledge because it "failed to exercise reasonable diligence in allowing an unlicensed apprentice and an employee still in his introductory period to work without supervision." (Sec'y Br., at 7; Ex. 11, at 30). Infra-Red disputes that Lueck was a supervisor and argues that it could not have known that Lueck or [redacted] would have failed to wear PPE because it had "extensively trained" them to do so. (Resp't Reply, at 24-25).

1. Whether Lueck Was [redacted]'s Supervisor on April 7, 2017 at the Job Site

An employee who "has been delegated authority over other employees, even if only temporarily, is considered to be a supervisor for the purposes of imputing knowledge to an employer. *Tampa Shipyards, Inc*. 15 BNA OSHC 1533, 1537 (No. 86-360, 1992) (consolidated). During the hearing, Tom McDonald was asked during direct examination: "Mr. Lueck supervised Mr. [redacted] on Infra-Red's behalf on April 7, 2017; isn't that right?" (Tr. 162). He replied:

[67] Although he responded "Yes" to a general question whether Infra-Red had a work rule that required he and [redacted] to wear PPE, he did not identify any Infra-Red work rule that governed work at the job site with specificity. He also did not say he had a "duty" to Infra-Red to wear PPE at the job site. (Tr. 129).

"That's your statement. I can't say that I necessarily agree to that due to their differences in experience and different job tasks."[68] Later during cross-examination, he stated he did not have an understanding that one was the supervisor of the other. (Tr. 162-63, 232). He agreed, however, that both he and Bob McDonald stated differently in writing three days after [redacted]'s injury. (Tr. 163; Ex. 14). Bob McDonald drafted and signed a letter, dated Monday, April 10, 2017, to the IBEW Local Union 223's training director describing [redacted]'s hand injury. (Tr. 165, 232, 409-10; Ex. 14). In the letter, Bob McDonald wrote: "Why [[redacted]] didn't have his PPE on would be a question for him **and the supervising electrician**." (Tr. 167; Ex. 14 (emphasis added)). The "supervising electrician" Bob McDonald was referring to was Lueck, the only employee with [redacted] on the job. (Tr. 151, 167-68, 416-17; Ex. 14). Tom McDonald testified that he reviewed the letter before it was mailed, and added the second sentence, which expressly states that Lueck was [redacted]'s supervisor: "[[redacted]] was working **under the supervision** of a local 223 licensed electrician replacing the batteries in the two units."[69] (Tr. 164-67; Ex. 14 (emphasis added)). Thus, three days after the incident both Infra-Red's president and Operations Manager stated in writing that Lueck was supervising [redacted] during the UPSS work. Tom McDonald also agreed at the hearing that Apprentice [redacted] could only work under the supervision of a licensed electrician when performing electrical work as defined by Massachusetts. (Tr. 153, 168;

[68] Tom McDonald testified that Infra-Red generally does not assign an employee to be in charge for one or two- day jobs involving one or two employees because they should be working as a team. (Tr. 231).

[69] Tom McDonald testified:

> Q. So you said that Mr. [redacted] was supervised on April 7th by a licensed electrician, right?
> A. That's what I said in that line, yep.
> Q. And you were referring to Mr. Lueck, right?
> A. I was referring to Mr. Lueck.

(Tr. 167).

Ex. 6). He also agreed that Infra-Red's safety program required the presence of a foreman on job sites.[70] (Tr. 168).

Despite strong contemporaneous written evidence to the contrary, Infra-Red nevertheless contends that Lueck was not in fact [redacted]'s supervisor.[71] (Resp't Reply, at 19; Ex. 14). The company's position, apparently, is that its two officials both either misrepresented the facts in their April 10, 2017 letter to the union or were somehow misinformed about the matter at that time. Infra-Red cites Lueck's testimony that he and [redacted] were working "together as a team," and that he was not [redacted]'s supervisor, and no one had told him he was [redacted]'s supervisor. (Tr. 121). Infra-Red also cites Tom McDonald's testimony, when asked if he had an "understanding" as to whether Lueck or [redacted] was supervising one or the other, that he "did not have an understanding that one was the supervisor of the other." (Tr. 160, 232). Tom McDonald stated that his contrary assertion in the union letter was "probably not an accurate statement," though when asked if he "assumed it to have been true at the time," confusingly replied, "Yeah – well, you know, [Lueck] was a licensed electrician, and was an apprentice." (Tr. 233; Ex. 14). Bob McDonald also agreed that he did not know whether the letter's assertion that Lueck was supervising [redacted] was true. (Tr. 410-11; Ex. 14).

The Court finds that Tom and Bob McDonald's testimony regarding Lueck's supervisory status lacks credibility. Their testimony, at times, was ambiguously worded, and they failed to persuasively explain why, if Lueck was not a supervisor or they had no knowledge about that issue, they purposefully inserted a sentence into their union letter expressly stating that Lueck *was*

[70] Infra-Red's safety program states that: "the foreman will monitor all safety activities on the site." (Tr. 168-69).
[71] Vanasse's report referred to [redacted] as the "Employee in Charge." (Tr. 608, 662; J. Ex. XVIII, at 0246). The Court finds Vanasse's description of [redacted] as the Employee in Charge to be without adequate support; and beyond his areas of expertise. [redacted], about age 23, was an unlicensed apprentice electrician at the time. There is no evidence that Vanasse ever spoke to [redacted] about who was in charge at the job site. Lueck was a licensed journeyman electrician. His electrician credentials far outweigh those of [redacted]. *See* fn 43, herein.

supervising [redacted]. They were apparently either readily willing to misrepresent matters in writing to the union or were misrepresenting matters (or feigning to lack knowledge) during the hearing. Lueck also had the authority to require the use of PPE while he and [redacted] worked at the job site. Lueck testified:

> Q. And from your understanding of the work assignments on April 7, 2017, was there anybody on-site who had the role such that could require the use of PPE?
>
> A. I – I guess.

(Tr. 47).

Based on the above, the Court finds that Lueck was acting as [redacted]'s supervisor while the work was being performed at the Nantucket Police Station on April 7, 2017. Accordingly, the Court finds that the Secretary has established actual knowledge through the imputation of Lueck's knowledge. *See Tampa Shipyards,* 15 BNA OSHC at 1537.

2. Whether Infra-Red Could Have Learned of the Violative Conditions with the Exercise of Reasonable Diligence

Whether an employer could have learned of a violative condition with reasonable diligence is determined "based on several factors, including an employer's obligation to inspect the work area, anticipate hazards, take measures to prevent violations from occurring, adequately supervise employees, and implement adequate work rules and training programs." *Jacobs Field Serv. N. Am.*, 25 BNA OSHC 1216, 1218 (No. 10-2659, 2015). The Secretary argues that if Lueck was not supervising [redacted], as Infra-Red maintains, then the company failed to exercise reasonable diligence because it allowed an unlicensed apprentice electrician to work on live equipment without supervision "in violation of Massachusetts law." (Sec'y Br., at 15, 17). The Secretary also argues that Infra-Red did not have a clear work rule regarding when PPE was required, and that this also reflects a lack of reasonable diligence. (Sec'y Br., at 17).

The evidence supports the Secretary's claim that it would have been unreasonable for Infra-Red to allow an unlicensed electrician to perform the work without any supervision. As discussed above, the company's president, Tom McDonald, admitted that he took care to deliberately insert the following sentence in a letter to a union representative regarding [redacted]'s injury: "[[redacted]] was working under the supervision of a Local 223 licensed electrician . . . ." (Tr. 165; Ex. 14). Although McDonald claimed that this was "probably not an accurate statement," the fact that he felt the need to revise the letter to include this specific sentence despite its purported inaccuracy provides strong evidence that it would have been improper to allow an unlicensed electrician to perform the hazardous work unsupervised. (Tr. 233). The company's Operations Manager, Bob McDonald, similarly referred to Lueck as a supervisor in the letter, writing that "[w]hy he didn't have his PPE on would be a question for . . . the supervising electrician." He wrote this despite claiming at the hearing that he did not "have personal knowledge whether it was true" that Lueck was supervising [redacted], which further reinforces the natural inference that both he and Tom McDonald believed a failure to supervise [redacted] would have reflected poorly on it (or perhaps would have violated union rules). Tom McDonald initially testified that he believed that because [redacted] was an unlicensed apprentice electrician, under Massachusetts law he "could only work under the direct supervision of licensed electrician."[72] (Tr. 158-60; Exs. 6, 14). He later contradicted himself during cross-examination by saying that there was no requirement for [redacted] to be working under a journeyman electrician at the job site because the work did not involve installing electrical wiring, conduits, and appliances, or making such repairs

[72] Massachusetts law states that an "apprentice shall mean a person who, not having been licensed under the provisions of M.G.L. [Massachusetts General Law] c. [Chapter] 141, is learning to properly perform electrical and systems work under the direct supervision of an appropriately licensed person." (Tr. 157-58). The Massachusetts General Law further states: "Direct supervision means direct personal on-site supervision." (Tr. 298-99).

as may be required only on the premises and property of persons, firms, or corporation.[73] The Court rejects this "after-the-fact" explanation and finds that the work performed by [redacted] needed to be performed under the supervision of a journeyman electrician. Infra-Red dispatched a journeyman electrician to the job site to accompany [redacted]. Infra-Red's April 10, 2017 letter to IBEW Local Union 223 asserted that [redacted] "was working under the supervision of a Local 223 licensed electrician replacing the batteries in two UPS units." It did not raise any argument that the work allowed [redacted] to not work under the supervision of a licensed journeyman electrician. (Tr. 212-14; Ex. 14). Additionally, if the Court were to accept Infra-Red's argument that Lueck was not [redacted]'s supervisor on April 7, 2017, and it does not, all of the above evidence indicates an Infra-Red decision to allow an unlicensed electrician to work on hazardous equipment with no supervision would show a lack of reasonable diligence. In that event, Infra-Red would have had no supervisor on site to observe or correct [redacted]'s failure to wear PPE, and he would have been injured as a result.

The evidence also supports the Secretary's claim that the company lacked a clear work rule regarding PPE use, which further exhibits a lack of reasonable diligence. Infra-Red contends that [redacted]'s failure to wear PPE violated its "well-established and extensive . . . work rules." (Resp't Br., at 22, 25). But the company never clearly states what those relevant PPE work rules were that it had in place to prevent the violation. *See* (Resp't Br., at 21-23, 66-67 (sections of principal brief presenting UEM defense); Resp't Reply, at 30-34 (section of reply brief discussing the UEM defense)). Infra-Red first states that its Employee Handbook mandates that field workers wear cotton clothing and work boots, and "perform a job risk analysis to determine what PPE should be worn." (Tr. 88; Resp't Br., at 11 (citing J. Ex. II, at 34)). The Employee Handbook

[73] Tom McDonald said: "[I]t's not something I would normally classify as that, no." (Tr. 214).

further states that employees "are expected to use job risk/hazard analysis techniques to determine to [sic] correct PPE to meet OSHA and the NFPA standards."[74] (J. Ex. II, at 34). Infra-Red later describes its PPE rule differently, however, stating: "Infra-Red trained its employees to always wear their PPE whenever working with a potentially live energy source. Stated otherwise, Infra-Red employees were required to always wear their PPE in such situations, regardless of what an arc flash calculation might reflect." (Resp't Br., at 17-18). Lueck testified that it "was expected of us that we always wear our suit when performing any type of task related to energized equipment or checking to see if that equipment was energized or not." (Tr. 99). Tom McDonald testified that he "coaches" all employees to wear "more than the minimum PPE". (Tr. 283). Francis testified that the amount of PPE employees were required to wear "depends on what job you are doing".[75] Vanasse testified that [redacted] was required to wear PPE regardless of what the calculation of the arc flash boundary was. (Tr. 657). Given these varying, conflicting and confusing company rules on PPE, Lueck understandably prevaricated when asked to identify a specific Infra-Red safety rule that articulated minimum PPE requirements for all jobs. He said he had not read any Infra-Red rule that said he should have told [redacted] to put PPE on for the job. He also did not recall Infra-Red having any rule that required him to call Infra-Red to report he saw another employee working without PPE. (Tr. 61-63). This evidence reflects that Infra-Red did not have a clear work rule regarding whether and what amount of PPE was required for the job at the police station.

[74] This is consistent with the Company Safety Program, which states: "The appropriately rated arc flash protection equipment, as determined by the job hazard analysis shall be worn." (Tr. 354; J Ex. III, at 0056)

[75] Francis has worked at Infra-Red since about 2008 and is not an electrician. (Tr. 450). He is the employee responsible for maintaining equipment and distributing PPE suits to electricians. When working on batteries, Francis stated, at a minimum, employees were supposed to be wearing a "12-cal flash suit", along with rubber gloves inserted into a leather glove. (Tr. 450-53, 460; Ex. 4, at 1). No one testified that [redacted] wore a 12-Cal or 40-Cal suit when he worked on batteries in Infra-Red's shop. On the contrary, Bob McDonald said he saw [redacted] working in the shop wearing only gloves, and not a suit. (Tr. 363). Nothing in the record indicates [redacted] was disciplined for not using proper PPE when working on batteries at the Holbrook shop.

In conclusion, the Court alternatively finds, assuming Lueck was not [redacted]'s on-site supervisor, that the Secretary has established Infra-Red's constructive knowledge of Lueck and [redacted]'s failure to wear adequate PPE due to Infra-Red's failure to exercise reasonable diligence by dispatching an unlicensed apprentice electrician to perform the UPSS work without any on-site supervision and the lack of a clear work rule regarding the use of PPE at the job site.

D. Access to the Cited Condition

The Secretary must prove that one or more employees had access to the cited condition. *Astra Pharm. Prods*., 9 BNA OSHC at 2129. As is evident from the discussion above, the Secretary established that Lueck and [redacted] had access to the violative condition; they were exposed to an electrical hazard due to their failure to wear PPE while performing the UPSS battery work. The Court therefore finds that the Secretary established all of the prima facie elements of a section 1910.335(a)(1)(i) violation.

E. Unpreventable Employee Misconduct Defense

Infra-Red argues that the violation resulted from unpreventable employee misconduct (UEM) (Resp't Br., at 21-23, 66-67; Resp't Reply Br., at 30-34). UEM is an affirmative defense to a violation. *Manganas Painting Co.,* 21 BNA OSHC 1964, 1997 (No. 94-0588, 2007). To establish the UEM defense, an employer must prove that it: "(1) established work rules designed to prevent the violative conditions from occurring; [76] (2) adequately communicated those rules to

[76] Lueck initially testified that he did not recall Infra-Red having a safety rule that required him to inform Infra-Red that he saw another employee working without PPE. (Tr. 63). During cross-examination, he agreed that Infra-Red's Employee Handbook II states that employees have a responsibility to report any unsafe working condition. (Tr. 90-91; J. Ex. II, at 44). Specifically, the Employee Handbook II states:

> As an employee, you have a duty to comply with the safety rules of Infra-Red Building and Power Services, to assist in maintaining a hazard-free environment, to report any accidents or injuries, and to report any unsafe equipment, working condition, process, or procedure immediately to a supervisor.

(Tr. 200-01; J. Ex. II, at 44).
Tom McDonald testified that Lueck was required, but failed, to report [redacted]'s failure to wear any PPE to Lueck's supervisor. He also said Infra-Red's Employee Handbook II required Lueck to be disciplined for this failure. (Tr. 201-02, 253-54; J. Ex. II, at 27, 45).

its employees; (3) took steps to discover violations of those rules; and (4) effectively enforced the rules when violations were discovered."[77] *(Id.)* The factors that the Commission considers when evaluating the UEM defense are the same as those it considers when evaluating whether the Secretary established constructive knowledge. *See Burford's Tree, Inc.*, 22 BNA OSHC 1948, 1951-52 (No. 07-1899, 2010) ("The Commission has considered these same factors in evaluating both an employer's constructive knowledge and the merits of an employer's unpreventable conduct affirmative defense."), *aff'd,* 413 F.App'x 222 (11th Cir. 2011) (unpublished); *S.J. Louis Constr. of Tex.*, 25 BNA OSHC 1892, 1898, n. 17 (No. 12-1045, 2016) (citing *Burford's Tree* for the proposition that the *"*factors for evaluating constructive knowledge are the same for evaluating unpreventable employee misconduct affirmative defense"); *Dana Container, Inc.*, 25 BNA OSHC 1776, 1780-82 (No. 09-1184, 2015) (finding violation foreseeable due to an inadequate safety program based on lack of UEM factors), *aff'd*, 847 F.3d 495 (7th Cir. 2017).

First, Infra-Red did not have a clear work rule on the use of PPE. As an essential element of the misconduct defense, the employer needs to establish that it has work rules designed to prevent the unsafe condition or violation of an OSHA standard. *Pride Oil Well Serv.*, 15 BNA OSHC 1809, 1816 (No. 87-692, 1992). A work rule is defined as "an employer directive that requires or proscribes certain conduct, and that is communicated to employees in such a manner that its mandatory nature is made explicit and its scope clearly understood." *J.K. Butler Builders, Inc.*, 5 BNA OSHC 1075, 1076 (No. 12354, 1977). As discussed above, the evidence establishes that Infra-Red lacked a clear work rule regarding PPE use.

[77] Lueck testified that Infra-Red's Employee Handbook II states that the creation of a hazard by an employee or disregard of safety rules would be dealt with through disciplinary action. (Tr. 91-92; J. Ex. II, at 37, 45). Infra-Red did not discipline Lueck or [redacted] for anything that they did working on the Nantucket Police Station project. (Tr. 63-64; 196-98, 419-20). Lueck testified that he considered a discussion he had with Chip McDonald about what he could have done better to be a form of discipline "in a sense", but he could not recall what he could have done better. (Tr. 139).

Infra-Red also failed to prove that it: 1) effectively communicated a clear use of PPE work rule to its employees, 2) took adequate steps to discover violations of any such rule, and 3) effectively enforced any such rule when a violation was discovered. Given that Infra-Red lacked a clear work rule to communicate, monitor, and enforce, it cannot establish any of these additional requirements. In addition, Infra-Red does not point to any persuasive evidence that it monitored worksites or otherwise took steps to discover safety rule violations.

Although an employer is not required to provide constant surveillance, it is expected to take reasonable steps to monitor for unsafe conditions. *Ragnar Benson, Inc.*, 18 BNA OSHC 1937, 1940 (No. 97-1676, 1999); *see also Texas A.C.A., Inc.*, 17 BNA OSHC 1048, 1050 (No. 91-3467, 1995) (employer's duty is to take reasonably diligent measures to detect hazardous conditions through inspections of worksites; it is not obligated to detect or become aware of every instance of a hazard). Infra-Red states vaguely that its "work rules were actively monitored (by Tom McDonald and others)," but it cites to no supporting evidence.[78] (Resp't Br., at 22; Resp't Reply, at 31-32). Its stated position regarding Lueck's supervisory status, moreover, undermines this claim. According to Infra-Red, it sent an unlicensed apprentice electrician to perform highly hazardous work on an island reachable by ferry without any supervision or means for it to monitor his compliance with the company's safety rules. Tom McDonald admitted that he had no intention of visiting the Nantucket worksite. (Tr. 160). Although the Court finds the company's claim that Lueck was not a supervisor inconsistent with the evidence, the company's position that it would have been acceptable to allow him and [redacted] to work unsupervised contradicts its contention that it always actively monitors its worksites.

[78] Infra-Red cites Tom McDonald's testimony at Tr. 161, lines 1-4. (Resp't Br., at 36). In these lines, Tom McDonald was asked if he was the only member of management that visits worksites to check on employees, and he replied simply, "I cannot say that that's true." (Tr. 161). He did not testify that he and others "actively monitored" work rule compliance.

Vanasse testified that Infra-Red provided Lueck and [redacted] with PPE that was specific to the work to be performed on April 7, 2017. His expert report states "appropriate PPE was available for the task …." (Tr. 575-76, 592-93). He concluded, however, that [redacted] "chose not to utilize it [PPE] resulting in his injuries." (J. Ex. XVIII, at 0252).

Infra-Red also failed to show that it effectively enforces its safety rules when it discovers violations. "To prove adequate enforcement of its safety rule, an employer must present evidence of having a disciplinary program that was effectively administered when work rule violations occurred." *Gem Indus., Inc*., 17 BNA OSHC 1861, 1865 (No. 92-1122, 1996), *aff'd*, 149 F.3d 1183 (6th Cir. 1998). In an effort to demonstrate an effective discipline enforcement program, Infra-Red points to an example where, in November 2010, Tom McDonald issued a written warning to an employee, Jamie Miranda, for performing switching operations without wearing proper PPE. (Tr. 261-62; Ex. 13; J. Ex. IV). A lone example of a written warning issued nearly six and a half years before the violation at issue does not by itself demonstrate an effective enforcement of company rules when violations were discovered.[79] Additionally, the Nantucket UPSS incident was not the first time Infra-Red learned [redacted] failed to bring his required PPE to a job site. Tom McDonald testified that in about September 2016, [redacted] went to an emergency job at a warehouse in Readville without any PPE. Although at the hearing, Tom McDonald testified that he did not know whether this was a violation of Infra-Red's work rules, during his pre-hearing deposition he admitted that he had stated [redacted]'s act was a PPE violation. This "bigger error" caused Tom McDonald to get into his car and go over to the

[79] Vanasse's testimony emphasized the importance of supervising employees working in the field. He said: "And if you find through your supervision or operations that they are not working safely, you have an obligation to ensure that you're correcting that." The Court, however, rejects Vanasse's opinion that the lone instance where Infra-Red took disciplinary action against an employee demonstrated that Infra-Red had an effective enforcement of company rules as of April 2017. (Tr. 603-04).

warehouse and perform the switching work himself. Tom McDonald wore his own PPE because switching work required PPE be worn. Other than receiving an apology and a promise "to never – never do that again and to always make sure he had his stuff [PPE] with him," no disciplinary action was taken against [redacted]. (Tr. 263-67, 294, 299-304, 420). This ineffective communication did not motivate and cause [redacted] to comply with Infra-Red's PPE rules six months later at the Nantucket job site. Bob McDonald also testified that he observed [redacted] wearing only his insulated gloves, and not his PPE suit, when assembling battery packs containing 12-volt batteries for UPSS in Infra-Red's Holbrook shop.[80] (Tr. 361-70; Ex. D). Infra-Red has not shown that it effectively enforced company PPE rules when violations were discovered.[81] For these reasons, Infra-Red's UEM defense fails.

F. Characterization

The Secretary characterized the PPE violation as "serious." Under section 17(k) of the Act, a violation is serious if "there is substantial probability that death or serious physical harm could result . . . ." 29 U.S.C. § 666(k); *see also Pete Miller Inc.,* 19 BNA OSHC 1257, 1258 (No. 99-0947, 2000) (a violation is serious if "a serious injury is the likely result should an accident occur."). Vanasse described the severe injuries that can occur as a result of an arc flash and these included "thermal burns, potential cardiac arrest, potential blindness, hearing loss," as well as nerve damage and "a concussion to your head or potentially collapsed lungs." (Tr. 559; J. Ex. X, at 0114). The record establishes that Lueck and [redacted]'s failure to wear appropriate PPE at the

[80] Bob McDonald said he has not observed [redacted] working outside Infra-Red's Holbrook facility. He further stated that the work [redacted] performed at Infra-Red's Holbrook shop and elsewhere between about January 4, 2016 through March 13, 2017 was similar in nature to the work [redacted] performed at the job site on April 7, 2017. Infra-Red had a contract with Verizon to replace batteries in 911 systems in all of the police stations in Massachusetts. (Tr. 366-67, 390-400, 413-14; Ex. D). Rega assigned [redacted] to all of these jobs. (Tr. 440-42).

[81] Infra-Red also took ineffective steps to discover violations of its PPE rules. It regularly dispatched teams comprised of one or two electricians to work sites without designating anyone in-charge as foreman or supervisor. (Tr. 231).

job site exposed them to a risk of serious electrical injury, and that [redacted] in fact suffered a serious hand burn requiring that he be taken to a hospital. The Court finds that the violation was serious.

G. Penalty

Section 17(j) of the Act requires that the Commission consider four factors when assessing a penalty: (1) the employer's size; (2) the gravity of the violation; (3) the employer's good faith; and (4) the employer's prior history of violations. 29 U.S.C. § 666(j); *Compass Envtl., Inc.*, 23 BNA OSHC at 1137. The gravity of the violation is generally accorded greater weight than the other factors. *See J. A. Jones Constr. Co.*, 15 BNA OSHC 2201, 2213-14 (No. 87-2059, 1993). The gravity of a violation "depends upon such matters as the number of employees exposed, the duration of the exposure, the precautions taken against injury, and the likelihood that any injury would result." (*Id.)* The statutory maximum penalty for a serious violation at the time the citation was issued in July 2017 was $12,675. 29 U.S.C. § 666(b); 83 Fed. Reg. 7-01, 15 (Jan. 2, 2018).

The Secretary argues that Infra-Red should receive the maximum penalty in effect in 2018, which was $12,934. 83 Fed. Reg. at 15. In the citation, however, the Secretary proposed a much lower penalty of $8,873. The Secretary does not explain (or mention) this discrepancy. In support for the most recently proposed penalty, the Secretary emphasizes that Infra-Red's employees were exposed to potentially lethal levels of electricity, and that [redacted] suffered a severe hand injury as a result of his failure to wear PPE. (Sec'y Br., at 22). Infra-Red argues that any penalty should be "substantially discounted" due to its "small size, its good faith at all times, and its stellar safety record." (Resp't Reply, at 34).

The Court finds that the gravity of the violation was very high as Lueck and [redacted] were exposed to potentially lethal levels of electricity. (Tr. 143, 628; Ex. E, at 0011). Infra-Red is a moderately sized company with about 40 employees; a discount is warranted for its size. (Tr. 149). As the company's president and Operations Manager failed to straightforwardly explain why they described Lueck as a supervisor in their union letter if he was not in fact a supervisor, and gave confusing, ambiguous responses when asked about it, a discount for good faith is not warranted. The Court agrees with Infra-Red, however, that some discount from the statutory maximum penalty is warranted due to its lack of prior violations and excellent safety record. CO Amara acknowledged that Infra-Red told him that the company had no prior workplace injuries in at least the five years prior to the hearing, and that this was a "very good" safety record. (Tr. 516). Based on these considerations, as well as the Secretary's failure to justify significantly increasing the penalty above what was originally proposed in the citation, the Court assesses the original penalty amount proposed: $8,873.

IV. Item 4 (insulated tool)

The Secretary alleges that Infra-Red violated 29 C.F.R. § 1910.335(a)(2)(i) because [redacted] failed to use a properly insulated tool when connecting the replacement batteries. (Sec'y Br., at 18). Section 1910.335(a)(2)(i) requires employees working near exposed energized conductors or circuit parts to use insulated tools if the tools might make contact with the conductors or parts. Photographs of the tool at issue as it appeared on June 26, 2018 are at exhibits F and G. (Tr. 112-116; Exs. F-G).

A. Applicability

The Secretary states that the standard applies because [redacted] and Lueck were working on exposed energized conductors. (Sec'y Br., at 18). Infra-Red does not dispute that they were

working on or near energized conductors, and that the requirement to use insulated tools applies. (Resp't Br., at 64; Resp't Reply, at 26-30). As discussed above, the record establishes that both employees worked near energized conductors and circuit parts. The Court finds that the standard applies.

B. Whether Terms of Standard Were Violated

The Secretary alleges that Infra-Red violated the terms of the standard because [redacted] used slip joint pliers that were "not properly insulated" when connecting the new batteries. (Sec'y Br., at 18). Infra-Red contends that the tool [redacted] used had insulated handles that were appropriate for the work and therefore it complied with the standard. (Resp't Br., at 64).

Although the Secretary does not dispute that [redacted]'s tool had insulated handles, he contends that it was not "properly insulated" because it had a "dangerous amount of uninsulated, exposed metal." (Ex. 12, at 1-2; Sec'y Br., at 18). The cited provision states only that employees "shall use insulated tools," and does not spell out what qualifies as an insulated tool or indicate whether a tool with insulated handles would qualify.[82] 29 C.F.R. § 1910.335(a)(2)(i). Neither party has cited any Commission precedent applying the provision. Implicit in the provision's requirement to use insulated tools, however, is a requirement that the insulation be sufficient to reasonably protect the employee during the work being performed. A tool with insulation only covering the handles would therefore comply with the provision if such insulation were sufficient to reasonably protect the employee. This interpretation is consistent with OSHA's statement in an interpretation letter, in response to a question regarding how "insulated tools" is defined, that

[82] The term "insulated" is defined separately in Subpart S as follows: "Separated from other conducting surfaces by a dielectric (including air space) offering a high resistance to the passage of current." 29 C.F.R. § 1910.399. Although this definition indicates that the material covering a tool must present a high resistance to the passage of current to qualify as insulation, it does not indicate whether such material must cover all parts of the tool in order to comply with section 1910.335(a)(2)(i).

"[w]hen any tool or handling equipment is said to be insulated, it is understood to be insulated in a manner suitable for the conditions to which it is subjected." OSHA Std. Interp. 1910.137 (Dec. 27, 1991).

The strongest evidence supporting the Secretary's position that [redacted]'s tool was insufficiently insulated to protect [redacted] is the expert written report of Dean Vanasse, which was admitted into evidence as a joint exhibit.[83] (J. Ex. VIII; Tr. 26, 573). In his report, Vanasse stated that [redacted]'s tool was inappropriate for the work because it had too much exposed metal, and that he should have instead used an insulated socket wrench:

> When [[redacted]] began the disassembly, he apparently determined that he did not have the **insulated socket required** and asked Dan [Lueck] if he had any tools he could use, Dan had the insulated slip joint pliers and provided them to . should have been aware that **there was too much exposed metal on this tool** which could short any battery terminals to each other or to the rack and not used it. The work should have stopped until the correct tools were obtained, but unfortunately the work continued and the incident occurred.

(Tr. 645-47; J. Ex. XVIII, at 0246 (emphasis added)). Vanasse added that [redacted]'s decision to "use the wrong tool for the job caus[ed] the incident . . . ." (*Id.*). Vanasse later reiterated that the "most appropriate tool to be utilized for the task . . . was an insulated socket / insulated driver rated 1000V," and explained that the "incident apparently occurred as a result of utilizing an insulated slip joint pump plier which has exposed uninsulated parts of sufficient dimensions to either bridge the air gap or make contact of one energized cell terminal to another cell terminal . . . ."[84] (*Id.,* at 0253). He concluded his discussion of Item 4 by stating: "The employees' choice to use the pliers resulted in the incident." (*Id.*). Vanasse further stated in his expert report that: [redacted] "should have known the tool he was using was inadequate for the task and was putting himself at risk in

[83] The Court finds Vanasse's courtroom testimony that was contrary to his written expert report to be unpersuasive and not credible. (Tr. 645-46, 664).

[84] Vanasse did testify that the tool [redacted] used was rated greater, at 1,000 volts, than the potential exposure in the UPSS, 360 volts. (Tr. 594-95).

utilizing the slip joint pliers for the task." Vanasse's expert report also stated: "It is my opinion based on the task and equipment construction, the incident could have been prevented with the use of the appropriate insulated tool (insulated socket and insulated driver)." (Tr. 649-50; J. Ex. XVIII, at 0251).

Vanasse's opinion that [redacted] could have and should have used an insulated socket is consistent with the toolkits that Infra-Red maintains in its shop. Photographs of these Infra-Red toolkits show that they include sockets of various sizes that are fully covered by red (also described as "orange") reinsulating material, in contrast to the slip joint pliers [redacted] used.[85] (Tr. 52, 57-58, 191-92, 456, 461; Ex. 3; J. Exs. VI, XV (photographs of the slip joint pliers [redacted] used, showing the tool had a significant amount of exposed metal beyond the insulated handles). Tom McDonald testified that employees are required to bring these toolkits to jobs and that [redacted] and Lueck should have brought one to the Nantucket UPSS job.[86] Tom McDonald would have brought the insulated toolkit to the job site. (Tr. 256). He said Infra-Red wanted to ensure that its employees were using insulated tools. (Tr. 189-92; Ex. 3). He also testified that Infra-Red's policy manual states: "Infra-Red Building and Power Services, Inc. will provide you with all the tools and equipment necessary to complete your job." Tom McDonald said that [redacted] and Lueck were required to use the tools in Infra-Red's toolkit on April 7, 2017 at the job site. (Tr. 188-90; Ex. 3; J. Ex. II, at 0040). Infra-Red does so because the insulated tools in its toolkits are safe to use and their condition was monitored by Infra-Red.[87] (Tr. 192).

[85] Francis said that the "orange" material on the tools in Infra-Red's toolkits is the insulating material for the tool. (Tr. 461-62). When shown the pair of slip pliers actually used by [redacted] on April 7, 2017, Francis agreed that the plier's jaws had no insulating material on them. He also said that he was unaware of any slip pliers that are completely insulated. (Tr. 462-63; Exs. F-G).

[86] Neither Lueck nor [redacted] brought one of these Infra-Red toolkits containing insulated tools to the job site on April 7, 2017. (Tr. 57-59).

[87] Tom McDonald testified that Infra-Red did not know what tools its employees were using on a job. He also said that Infra-Red did not inspect or monitor the condition of hand tools owned by its employees that might be used during a job. (Tr. 192-96).

In support for its position that [redacted]'s tool was sufficiently insulated, Infra-Red cites the UPSS Manual and the DataSafe HX Top Terminated Batteries, 6 and 12 Volt Battery, Installation, Operation and Maintenance Instructions (Battery Instructions). The UPSS Manual includes instructions for installing and servicing the batteries, and states: "Use tools with insulated handles." (Tr. 279; Ex. E, at 0035). The Battery Instructions provide an identical instruction: "Use tools with insulated handles." (Tr. 225-28; J. Ex. XIV, at 228). [redacted]'s tool had insulated handles in accord with these manufacturer instructions, and its insulation was rated to a voltage amount greater than what was required for the battery work. Lueck testified that the tool, which he had lent to [redacted], was rated to 1000 volts and had "stops" to prevent one's hand from sliding past the insulation. (Tr. 49, 58, 109-10). He said that he reviewed the UPSS Manual prior to the work, and had determined that it was an appropriate tool for the work based on the instruction to use a tool with insulated handles. (Tr. 102-04, 112; Ex. E, at 0035). Lueck agreed that the maximum voltage of the 30 batteries in each UPSS set connected together, at 13.7 volts each, was substantially less than 1000 volts, so the handles were "overrated" for the task.[88] Lueck testified that the channellock tool handles were "overrated" for a 480-volt or 600-volt piece of equipment. (Tr. 49, 111-12). Tom McDonald similarly testified that the tool was insulated "sufficiently" and "sufficiently rated" for the UPSS work. (Tr. 257, 279; Exs. F and G).

Infra-Red also cites Vanasse's testimony at the hearing, in which he qualified some of the opinions in his written expert report. On direct examination, Vanasse agreed that [redacted] "used a proper insulated tool." (Tr. 594). Vanasse said that he looked up the tool's model number, and determined that it was "1,000 volt rated," which was "greater than the potential exposure in [the UPSS] system." (Tr. 595). He explained, "The maximum voltage that [[redacted]] would have

[88] 30 batteries X 13.7 volts equals a 411-volt piece of equipment. (Tr. 112).

been exposed to was 360 volts." (Tr. 595). On cross-examination, Vanasse was asked whether he knew that [redacted]'s tool was the "wrong tool for the job," and he replied, "No, I don't." (Tr. 644). He testified that his opinion was that [redacted] should not have used that tool because it had exposed metal and a better tool was available, but then said that it nevertheless may have been adequate:

> That is something that I don't know based on me not going to the site and seeing the specific equipment, nor understanding fully the dimensions of what was in place at the time. It may have been [adequate for the task]. There was a more appropriate tool to use.

(Tr. 648-49). Vanasse agreed that in his expert report he stated that [redacted] "did not have the insulated socket [tool] required," and that the tool he used was inadequate because "there was too much exposed metal . . . which could short any battery terminals to each other or to the rack and [he should] not [have] used it." (Tr. 645, 647). But after subsequently getting "more information about the event and circumstance," which he believed included seeing "more detailed photos" and the "manufacturer's information," he stated that his opinion changed and he could not "state that an insulated socket set was necessarily the required or appropriate tool . . . ." (Tr. 645-46). He added that the "manufacturer recommended insulated handle tool," that the tool [redacted] used was an "insulated handle tool," and that his revised opinion was that an insulated socket was "not definitely a more appropriate tool . . . ."[89] (Tr. 650). He later appeared to contradict himself, however, stating that "there was a better tool to be utilized, in my opinion . . . ." (Tr. 664).

Although Vanasse's testimony is confusing and at times contradictory, the Court interprets it to mean that while his opinion in his report that a safer tool was available did not change, after reviewing the UPSS and battery manufacturers' recommendations as well as photographs of the

[89] The CO who inspected Infra-Red, Amara, agreed that neither he nor anyone else at OSHA has "determined what the appropriate tool" would have been. (Tr. 500).

batteries, he could not *definitively* assert that [redacted]'s tool was insufficiently insulated. This interpretation is supported by his testimony that it "[c]ould have been a judgment based on the qualifications of the employee at the time." (Tr. 650). It is also consistent with his agreement, on redirect-examination, that in his report he was making a distinction between "minimum requirements and best practices." (Tr. 663-64; Resp't Br., at 59, ¶¶ 349-50). The "distinction," he testified, "was [that] there was a better tool to be utilized, in my opinion," but the tool [redacted] used was "an insulated tool which can be utilized at that voltage [of the batteries [redacted] was working on]." (Tr. 664).

While the record is mixed, the preponderance of the evidence supports the Secretary's contention that the tool [redacted] used was insufficiently insulated. Although the UPSS Manual and the Battery Instructions direct technicians to use tools with insulated handles, they do not specify how much exposed metal on any given tool is permissible. Vanasse's written expert report clearly indicates that the particular tool that [redacted] used had too much exposed metal to perform the job safely. The fact that [redacted] in fact burned his hand while using the tool due to its exposed metal further supports this conclusion. Although Vanasse stated at the hearing that he could not definitively say that the tool could not have been used safely, he did not change his opinion that it had too much exposed metal and it would have been safer for [redacted] to use a fully insulated socket tool. The Court therefore finds that the Secretary has established that Infra-Red violated the terms of the standard.

C. Access

[redacted]'s failure to use a properly insulated tool exposed him to an electrical hazard, and he severely injured his hand as a result. The Secretary therefore established that an employee had access to the cited condition.

D. Knowledge/Unpreventable Employee Misconduct

As discussed above, the Secretary established that Infra-Red knew, or with the exercise of reasonable diligence, could have known, of Item 3's violative condition, and its UEM defense to Item 3 fails. A similar analysis and outcome apply to Infra-Red's knowledge of Item 4's violative condition and its UEM defense to Item 4. Lueck knew [redacted] was using a tool that was not fully insulated and that was not an Infra-Red tool. It was one of Lueck's own personal tools, and he lent it to [redacted] to perform the work. When asked how he decided that his channellock tool was appropriate for use at the job site, he stated: "Just seemed like they were a practical tool to use at the time." (Tr. 60). It was "practical" for [redacted] to use the channellock tool because that's all they had with them. They had not brought one of Infra-Red's insulated tool kits that contained fully insulated tools that would have been better suited for the work at the job site. Lueck knew [redacted] would be working near exposed energized conductors with a tool that might make contact with such conductors. Just as Vanasse stated in his expert report that [redacted] "should have known the tool he was using was inadequate for the task and was putting himself at risk in utilizing the slip joint pliers for the task," Lueck should have known the same. (Tr. 649-50; J. Exs. VI, XVIII, at 0251). He was in a position to know that the channellock split joint pliers were not sufficiently insulated to perform the work safely. Both Lueck and [redacted] could readily see that there was too much uninsulated, exposed metal beyond the insulated handles on the channellock tool. This would have been readily apparent to both of them at the job site. (Tr. 645, 647; J. Ex. 18, at 4; Exs. F-G).

Since Lueck was a supervisor, his knowledge of [redacted]'s failure to use a sufficiently insulated tool is imputed to Infra-Red. In the alternative, if Lueck was not a supervisor, then the Secretary established constructive knowledge because the company failed to exercise reasonable

diligence in allowing an unlicensed electrician to work unsupervised and lacked a clear work rule regarding insulated tools.

Infra-Red neither had, nor communicated, a clear work rule on the use of safe, insulated tools. Lueck thought he was allowed to use personal tools on Infra-Red's jobs. (Tr. 59-60). Infra-Red's Employee Handbook states that Infra-Red will provide all tools and equipment necessary to complete the job. (Ex. 11, at 15). Tom McDonald was unable to provide any clear rule regarding the use of tools, and prevaricated and gave confusing responses when asked what the company's rules were. Initially, he testified that Infra-Red employees were required to use Infra-Red's insulated tool kits, which contain fully insulated tools. (Tr. 190.) When asked if employees were required to use the insulated tools in the company tool kits, he replied: "Okay. Yes, I would say." (Tr. 190). A few questions later, however, he said that using the insulated tool kits was "not necessarily required." (Tr. 191). But he then agreed that in his deposition he had said that employees *were* required to use the insulated took kits. (Tr. 192). At another point, he testified that employees were allowed to use their personal tools. (Tr. 195). All of this testimony establishes that the company lacked a clear work rule that could have prevented the violation.

Infra-Red also failed to take steps to adequately discover safety violations relating to the use of unsafe tools, and to discipline employees for using improperly insulated tools. Tom McDonald was the only identified person who visited sites to discover safety violations and he admitted that he had no intention of visiting the Nantucket site. (Tr. 160-62). Infra-Red regularly dispatched teams comprised of one or two electricians to work sites without designating anyone in-charge as foreman or supervisor. (Tr. 231). Infra-Red also did not enforce any rules regarding the use of fully insulated, safe tools when any such rules were violated, as evidenced by its failure to discipline Lueck for lending [redacted] the improper tool. Tom McDonald admitted that he did

not discipline Lueck for his actions, and that in his deposition he also admitted that no one else at Infra-Red had either. (Tr. 196). [redacted] was not disciplined for using an improperly insulated tool at the Nantucket job site. (Tr. 196). [redacted]'s use of the improper tool thus was foreseeable because Infra-Red's owner allowed its employees to use personal tools despite an unenforced company policy to the contrary.

Since Infra-Red lacked a clear work rule regarding insulated tool use, and failed to effectively communicate, monitor compliance with, and enforce violations of the safety rules that it did have, its argument that Item 4's violation resulted from UEM fails. (Answer, at 4-5; Resp't Br., at 67, ¶ 49).

E. Characterization

The Secretary characterized the violation as "serious." Under section 17(k) of the Act, a violation is serious if "there is substantial probability that death or serious physical harm could result . . . ." 29 U.S.C. § 666(k); *see also Pete Miller Inc.,* 19 BNA OSHC 1257, 1258 (No. 99-0947, 2000) (a violation is serious if "a serious injury is the likely result should an accident occur."). The record establishes that [redacted]'s failure to use a sufficiently insulated tool exposed him to a risk of serious electrical injury, and that he in fact suffered a serious hand burn requiring that he be taken to a hospital. The Court finds that the violation was serious.

F. Penalty

As stated above, section 17(j) of the Act requires that the Commission consider the gravity of the violation when determining the penalty, as well as the employer's size, good faith, and prior history of violations, with gravity being the most important factor. 29 U.S.C. § 666(j); *Compass Envtl.*, 23 BNA OSHC at 1137; *J. A. Jones*, 15 BNA OSHC at 2213-14. The Secretary requests that Infra-Red receive the statutory maximum penalty for a serious violation in effect in 2018,

$12,934. *See* 29 U.S.C. § 666(b); 83 Fed. Reg. 7-01, 15 (Jan. 2, 2018). As with the other Items, the citation proposed a much lower penalty of $8,873, and the Secretary has not explained the basis for this discrepancy. The Secretary presents essentially the same arguments regarding the penalty for all the Items; the Secretary emphasizes that the work was very dangerous, and that [redacted] suffered a severe injury. (Sec'y Br., at 22). Infra-Red also presents the same arguments regarding the penalty for all the Items: that the penalty should be "substantially discounted" due to its "small size, its good faith at all times, and its stellar safety record." (Resp't Reply, at 34).

The Court agrees that the gravity of the violation was high, as [redacted] was exposed to potentially lethal levels of electricity, and he in fact suffered a severe hand injury as a result. (Tr. 143, 628; Ex E, at 0011). However, the gravity was somewhat mitigated by his use of a tool that, at least, had insulated handles, although the tool was, nevertheless, still unsafe for the job. *See J.A. Jones*, 15 BNA OSHC at 2213-14 (the gravity of a violation depends in part on whether any precautions were taken against injury). As the parties' arguments regarding the effect of the employer's size, good faith, and prior history on the penalty amount are the same as those they presented regarding the PPE violation, the Court takes those factors into account in the same manner as discussed above regarding the PPE violation. Based on the gravity and those other considerations, as well as the Secretary's failure to justify significantly increasing the penalty above what was originally proposed in the citation, the Court assesses a penalty of $7,000.

FINDINGS OF FACT AND CONCLUSIONS OF LAW

All findings of fact and conclusions of law relevant and necessary to a determination of the contested issues have been made above. *See* Fed. R. Civ. P. 52(a). All proposed findings of fact and conclusions of law inconsistent with this decision are denied.

ORDER

Based upon the foregoing findings of fact and conclusions of law, it is ORDERED that:

1. Item 1 of Citation 1, alleging a serious violation of 29 C.F.R. § 1910.332(b)(1), is VACATED.

2. Item 2 of Citation 1, alleging a serious violation of 29 C.F.R. § 1910.333(a)(2), is VACATED.

3. Item 3 of Citation 1, alleging a serious violation of 29 C.F.R. § 1910.335(a)(1)(i), is AFFIRMED, and a penalty of $8,873 is ASSESSED.

4. Item 4 of Citation 1, alleging a serious violation of 29 C.F.R. § 1910.335(a)(2)(i), is AFFIRMED, and a penalty of $7,000 is ASSESSED.

SO ORDERED.

/s/
The Honorable Dennis L. Phillips
U.S. OSHRC Judge

Date: October 7, 2019
Washington, D.C.