

THIS CASE IS NOT A FINAL ORDER OF THE REVIEW COMMISSION AS IT IS PENDING COMMISSION REVIEW

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.

United States Postal Service,

Respondent,

and

National Association of Letter Carriers
(NALC),

Authorized Employee Representative,

And

National Rural Letter Carriers' Association
(NRLCA)

Authorized Employee Representative.

OSHRC Docket No.: **16-1872**

Appearances:

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For Complainant

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For Respondent

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For NALC

BEFORE: Administrative Law Judge Sharon D. Calhoun

DECISION AND ORDER

I. INTRODUCTION

On the afternoon of June 10, 2016, a city letter carrier for the United States Postal Service began to feel sick as he delivered mail on his route in Benton, Arkansas. He experienced a spinning

sensation and began to stumble. He started vomiting and sweating profusely. He staggered to a van parked on the street, opened one of its doors, and collapsed on the front seat. A homeowner eventually noticed him and called 911. Emergency medical technicians arrived, provided emergency treatment for the carrier, and transported him by ambulance to a hospital.

The Benton Post Office notified the Occupational Safety and Health Administration of the carrier's hospitalization. OSHA opened an inspection of the Benton Post Office on July 14, 2016. As a result of the inspection, the Secretary issued a one-item Citation and Notification of Penalty to the United States Postal Service (referred to in this proceeding as the Postal Service or USPS) on October 14, 2016. The Citation alleges a repeat violation of § 5(a)(1), the general duty clause (29 U.S.C § 654(a)(1)), of the Occupational Safety and Health Act of 1970, 29 U.S.C. §§ 651-658) (Act).¹ The Citation alleges the Postal Service exposed its employees "to the hazard of excessive heat while walking and delivering mail in an outdoor environment." The Secretary proposes a penalty of \$124,709 for the alleged violation and seeks enterprise-wide implementation of specified abatement measures.

This case is one of five pending before the Court in which the Secretary alleges the Postal Service exposed its employees to excessive heat or high heat levels as they delivered the mail. The National Association of Letter Carriers (NALC) and the National Rural Letter Carriers' Association (NRLCA), authorized employee representatives, elected party status in the proceedings. They did not present evidence, examine witnesses, or submit post-hearing briefs in this proceeding (Tr. 16). The five cases were consolidated early in the proceedings for settlement purposes, but the parties were unable to resolve the issues. On January 26, 2018, Judge Heather Joys, the settlement judge, severed the cases for hearing, and they were reassigned to the Court, who heard the five cases sequentially in October and November of 2018.²

The parties agreed the Court would hold a separate hearing (referred to as the national hearing) to present testimony from expert witnesses and witnesses addressing issues common to the five cases. The Court held the 12-day national hearing in Washington, D.C., from February 25

¹ The Secretary initially characterized the alleged violation as serious. The Secretary subsequently amended the Citation and complaint to characterize the alleged violation as repeat (Tr. 9; National Hearing (NH) Tr. 1149-61, 1337-41).

² The five cases arose from incidents in Benton, Arkansas (the present case) (No. 16-1872); San Antonio, Texas (No. 16-1713); Houston, Texas (No. 17-0023); Martinsburg, West Virginia (No. 17-0279); and Des Moines, Iowa (No. 16-1813).

to March 12, 2019. The testimony and exhibits in the national hearing are part of the records in the five cases, unless otherwise noted. The records of the individual cases were not admitted in the other actions, unless noted.³

This is the first of the five Postal Service cases heard by the Court. The hearing was held from October 16 to October 19, 2018, in Little Rock, Arkansas.⁴ The parties submitted briefs for all five cases on September 17, 2019.

For the reasons that follow, the Court finds the Secretary did not establish a condition or activity in the workplace presented an excessive heat hazard to Benton's carriers on June 10, 2016. The Court also finds the Secretary failed to show an economically feasible means existed to materially reduce the alleged hazard of excessive heat. The Citation is vacated.

II. JURISDICTION AND COVERAGE

The Postal Service timely contested the Citation on November 1, 2016. The parties stipulate the Commission has jurisdiction over this action, and the Postal Service is a covered employer under the Act (Exh. J-1, ¶¶ 1-2; Tr. 24).⁵ Based on the stipulations and the record evidence, the Court finds the Commission has jurisdiction over this proceeding under § 10(c) of the Act, and the Postal Service is a covered employer under § 3(5) of the Act.

III. EXECUTIVE ORDER NO. 13892

The parties filed post-hearing briefs on September 17, 2019, in the five Postal Service cases. On October 15, 2019, President Trump issued Executive Order No. 13892, *Promoting the Rule of Law Through Transparency and Fairness in Civil Administrative Enforcement and Adjudication*, 84 Fed. Reg. 55239 (October 15, 2019) (E.O. 13892). Section 4 of E.O. 13892 provides:

Sec. 4. Fairness and Notice in Administrative Enforcement Actions and Adjudications. When an agency takes an administrative enforcement action, engages in adjudication, or otherwise makes a determination that has legal consequence for a person, it may apply only standards of conduct that have been publicly stated in a manner that would not cause unfair surprise. An agency must

³ References in this decision to testimony and exhibits from the national hearing are indicated by *NH* followed by the transcript page(s) or exhibit number(s).

⁴ One additional witness relevant to this proceeding testified at the hearing for Docket No. 17-0023 in Houston, Texas. His testimony is admitted as part of the record in this case, the Houston case, and the San Antonio case (No. 16-1713) (Tr. 1005).

⁵ Paragraph 2 of Exhibit J-1 provides: "By virtue of the Postal Employees Safety Enhancement Act of 1970, the OSH Act became applicable to Respondent in the same manner as any other employer. Pub. No. 105-241, 112 Stat. 1572-1575 (1998); see also 29 USC Section 652(5)."

avoid unfair surprise not only when it imposes penalties but also whenever it adjudges past conduct to have violated the law.

On November 6, 2019, the Postal Service submitted a letter to the Court with a copy of E.O. 13892 attached “as supplemental authority.” The Postal Service states:

[E.O. 13892] is relevant to two primary arguments in the Postal Service’s Post-Trial Briefs:

1. The Commission has already recognized that defining a hazard as “excessive heat,” which the Secretary has done in this case, falls far short of due process. [E.O. 13892] makes it clear that OSHA is required to afford regulated parties safeguards “above and beyond” those required for due process. Vaguely defining a hazard as “excessive heat” does not meet [E.O. 13892’s] requirements;

2. [E.O. 13892] makes it clear that OSHA’s reliance on its heat chart and other guidance documents as the basis for establishing a heat hazard is impermissible. While agency guidance documents can be useful in enhancing the regulated community’s understanding of a regulation, they are not intended to form the basis of a violation. Guidance documents do not have the benefit of undergoing notice and comment rulemaking, and thus do not provide the regulated community with fair notice.

(Letter, p. 2) (footnotes omitted)

The Secretary filed a response on December 4, 2019, stating the terms of E.O. 13892 do not create rights enforceable against the Secretary, and due process concerns are not implicated where the Postal Service has recognized or should have recognized the alleged excessive heat hazard at issue. The Secretary notes the Postal Service has suffered no unfair surprise as that term is used in the Order.

By order dated January 30, 2020, the Court accepted the Letter and attached copy of E.O. 13892 as supplemental authority in this proceeding in accordance with FRCP 15(d), which provides:

(d) SUPPLEMENTAL PLEADINGS. On motion and reasonable notice, the court may, on just terms, permit a party to serve a supplemental pleading setting out any transaction, occurrence, or event that happened after the date of the pleading to be supplemented. The court may permit supplementation even though the original pleading is defective in stating a claim or defense. The court may order that the opposing party plead to the supplemental pleading within a specified time.

Having considered the parties’ arguments, the Court concludes the Secretary did not overstep the terms of E.O. 13892 when he cited the Postal Service for a violation of § 5(a)(1) for excessive heat exposure. Section 11(c) of E.O. 13892 states, “This order is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by

any party against the United States, its departments, agencies, or entities, its officers, employees, or agents, or any other person.” Section 11(c) of E.O. 13892 bars review of an agency’s compliance with E.O. 13892 in adjudicative proceedings.

Furthermore, § 9(c) of the Act grants the Secretary the authority to cite employers for violations of § 5(a)(1). 29 U.S.C. § 658(a). Section 11(a)(i) of E.O. 13892 provides, “Nothing in this order shall be construed to impair or otherwise affect: (i) the authority granted by law to an executive department or agency, or the head thereof.” E.O. 13892 cannot be used to restrict the Secretary’s congressional authority to implement § 5(a)(1).

Finally, E.O. 13892 states agencies “may apply only standards of conduct that have been publicly stated in a manner that would not cause unfair surprise.” Section 5(a)(1) requires employers to “furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees.” 29 U.S.C. § 654(a)(1). Hazards are recognized within the meaning of § 5(a)(1) if they are known to the cited employer or would be known to a reasonably prudent employer in the industry. *SeaWorld of Fla., LLC v. Perez*, 748 F.3d 1216 (D.C. Cir. 2014). The Secretary previously cited the Postal Service for the willful exposure of carriers to excessive heat hazards, and a Commission judge affirmed the violation. The decision and order became a final order of the Commission. *United States Postal Service*, No. 13-0217, 2014 WL 5528391 (OSHRC Oct. 24, 2014). The Postal Service cannot claim plausibly that it was unfairly surprised by subsequent citations for repeat violations alleging exposure of carriers to excessive heat hazards.

IV. THE BENTON HEARING

Stipulations

The parties stipulate the following:⁶

...

3. [The Postal Service] is divided into seven Areas which are in turn divided into Districts.
4. The seven areas are: Northeast Area; Eastern Area; Western Area; Pacific Area; Southern Area; Great Lakes and Capitol Metro.
5. This hearing involves operations at the post office at 1425 Military Rd., Benton, Arkansas (Benton) which is located in the Southern Area.

⁶ Paragraphs 1 and 2 of Exhibit J-1 stipulate the Commission has jurisdiction over this action, and the Act covers the Postal Service.

6. On June 10, 2016, [LC-1]⁷ was an employee of [the Postal Service] who worked at the Benton post office.
7. On June 10, 2016, LC-1 was a city letter carrier who delivered mail for [the Postal Service].
8. On June 10, 2016, LC-1 was assigned to Route 15006 which was his regular route.
9. On June 10, 2016, LC-1's scheduled begin tour time was 7:30 a.m.
10. On June 10, 2016, the total weight of the mail that LC-1 was supposed to deliver was 95.75 pounds.
11. On June [10], 2016, the total number of pieces that LC-1 was supposed to deliver was 1,426.
12. The members of management working at the Benton Post Office on June 10, 2016, do not recall having had any specified discussions with LC-1 before he departed to his route that day.
13. On June 10, 2016, LC-1 drove a Long Life Vehicle (LLV) for [the Postal Service].
14. The LLV did not have air conditioning.
15. The LLV did have a fan on the dashboard that was 6" in diameter.
16. LC-1 was hospitalized on June 10, 2016.

(Exh. J-1)

Background

Overview of the Benton Post Office

In June of 2016, city letter carriers for the Benton Post Office delivered mail on seventeen full-time routes (configured so carriers can deliver the mail in 8 hours daily) and three auxiliary routes (which can be completed in fewer than 8 hours).⁸ City carrier associates (CCAs) are contract carriers who usually deliver mail for the auxiliary routes, aided sometimes by city carriers (Tr. 176, 570-71, 751, 774). In postal nomenclature, a *pivot* is the portion of a route assigned to a carrier in addition to his or her regular route.⁹ Pivots include auxiliary routes as well as regular routes

⁷Pseudonyms are used in this Decision and Order to preserve the privacy of the Benton Postal Service employees and former employees.

⁸ In this decision and order, the Court refers to respondent as "the Postal Service" or "USPS." The Court uses "post office" to refer to supervisory personnel at the Benton Post Office or the physical building, depending on context.

⁹ Brian Renfroe, executive vice president of NALC, stated carriers call the extra route portion by various names in the different areas. "Some call it a piece, a pivot. I've heard a loop. That's what it's called where I'm from. A drag. Pigtail. I've heard some words that are not appropriate for this Court to describe, you know. But they all mean the same thing:

whose assigned carriers are not working that day (Tr. 176-77). Carriers designated as T6 have rotating schedules, working five days on five different routes, to cover the days off of the regular carriers (Tr. 220).

By union contract, city carriers are guaranteed 40 hours of work per week but may volunteer for the *work assignment list*, meaning they are willing to work overtime during their regularly scheduled days but only on their own their routes. City carriers may also volunteer for the *overtime-desired list*, indicating their willingness to deliver on other routes and to work on their scheduled days off. City carriers have the opportunity to sign up for the lists once a quarter and may remove themselves from them at any time (Tr. 69-70, 233-34, 533-34). In some circumstances, supervisors may mandate carriers to work overtime even if they are not on the work assignment or overtime-desired lists. Rules established by the collective bargaining agreement (CBA) between the Postal Service and NALC determine the order in which supervisors assign overtime (Tr. 235).

Trucks hauling the day's mail for Benton arrive at the post office at 4:15 a.m., 5:30 a.m., and 6:45 a.m. (Tr. 775-76). The incoming mail comprises different classes (Priority Mail Express, Priority Mail, First-Class Mail, periodicals, etc.) with different delivery schedules. The delivery schedule is determined by the *service standard*, the delivery time to which the Postal Service has committed. If a post office does not meet the service standard for Priority Mail Express, it must refund the service fee to the customer (Tr. 777-78).

The Benton Post Office staffs a morning (A.M.) supervisor and an afternoon (P.M.) supervisor. The A.M. supervisor arrives at 6:00 a.m. and ensures all delivery routes are covered and assigns pivots if necessary. When the clerks arrive, they unload the mail and separate it. They place the letter mail in a designated area for the carriers to pick up. They also sort magazines (which the Postal Service calls *flats*) and place them at the individual cases the carriers use to prepare their mail for delivery. This morning sorting process lasts approximately 3 hours (Tr. 222-23, 777). Carriers are not permitted to assist with or perform tasks assigned to clerks because it would be "crossing crafts" and is prohibited by the CBA (Tr. 223).

The post office anticipates increases in mail volume on certain days: Mondays (due to mail accumulating on Sunday, when no delivery occurs); days following a federal holiday (especially

It's a portion of another assignment that I'm going to do in addition to the other work that I have for that day." (NH Tr. 168)

Tuesdays following a Monday holiday, when mail accumulates for two days); and Wednesdays (when pennysaver coupons are delivered to every residence) (Tr. 329-31).

During the day, carriers collect *outbound mail* on their routes, and customers also bring mail to the post office or deposit it in blue USPS collection boxes. The P.M. supervisor ensures the day's outbound mail is brought to the post office before the last dispatch truck leaves for the Postal Service's processing and distribution center in North Little Rock. The first dispatch truck leaves at 4:30 p.m. and the second at 5:40 p.m. (Tr. 780). It takes approximately 30 minutes to load the truck for dispatch. If carriers do not bring outbound mail to the post office in time for dispatch, a Postal Service employee must drive approximately 40 minutes to the North Little Rock plant to deliver the late mail. The deadline for delivery to the plant is 8:00 p.m. (Tr. 225-26, 781). Outbound mail that does not arrive at the North Little Rock center in time is "a failed product." (Tr. 781)

Daily Routine of City Letter Carriers

LC-2 is a city letter carrier for the Benton Post Office. He has worked for the Postal Service for almost 24 years. He served as president of the local union from 2009 to 2017. LC-2 acquired his route when it came up for bid in 2014, and he is on the work assignment list for overtime. He regularly delivers mail on his route 5 days a week, but he often works 6 days (Tr. 67-72, 83).

LC-2 described a typical day for him as a carrier at the Benton Post Office. When he gets up, he looks at a weather app on his phone "to see if it's going to rain and . . . to see what the temperature is going to be." (Tr. 131) He arrives at the post office and clocks in at 7:30 a.m. (city carriers are not permitted to clock in early) (Exh. J-1, ¶ 9; Tr. 91). He first goes to the parking lot and inspects his Long Life Vehicle (LLV), the familiar boxy Postal Service delivery truck. Using a checklist, he notes any deficiencies for listed items ("turn signals, headlights, and windshield wipers, and those type of things" (Tr. 88)) and, if necessary, submits a form to the maintenance department to request needed repairs. He then goes to the post office workroom to prepare the mail for his route (Tr. 87-88). The post office is air-conditioned in warm weather (Tr. 155, 228).

In the post office workroom, the supervisor's desk is set in the center on a raised platform. The cases in which the carriers organize their mail are set in a U-shape around the desk, in view of the supervisor (Tr. 75). Sometimes supervisors will notify carriers they have automated delivery point sequence (DPS) mail that has already been organized in trays. The supervisor also informs the carriers what time the supervisor expects them to be out of the post office and delivering mail,

based on that day's volume of mail (Tr. 72-73). About once a week, usually on a Friday, the supervisor gives a 5-minute *standup safety talk* as the carriers gather around the supervisor's desk (Tr. 92-93, 255).

LC-2 proceeds to *case* the letters, flats, and small parcels or rolls (SPRs) to be delivered on his route. A case has five shelves, with every shelf containing numerous 1-inch cells or slots for each address on the route, so the carrier can organize the mail in delivery sequence. Supervisors expect carriers to maintain a standard pace of "18 and 8," meaning casing 18 letters and 8 flats per minute (Tr. 93, 227). After casing the day's mail, LC-2 pulls the larger parcels for his route and takes them out to his LLV in a hamper, sometimes making several trips. He then withdraws his DPS and checks the *hot case* (where clerks continue to process mail as carriers' case their routes) one more time before clocking out to the street. He drives his LLV to the first *park point* (designated parking spot) on his route. On an average day, casing takes about an hour and 20 minutes. The casing time is included in the 8 hours allotted for completing the route. City carriers at the Benton Post Office are usually on the street by 9:00 a.m. (Tr. 88-92, 227).

MDDs and Cell Phones

The Benton Post Office maintains a call log listing the cell phone numbers of its carriers so supervisors can contact them on their routes (Tr. 241, 244). The post office forbids carriers from using cell phones while driving their LLVs (Tr. 246). Prior to June 10, 2016, LC-1 and LC-3 understood they were not to use their cell phones while delivering mail on foot (Tr. 552-53). Benton Post Office Supervisor K.S. testified the post office instructed the carriers that if they were in an emergency situation, they should first call 911 and then call their supervisors. She was unaware of a rule requiring carriers to leave their cell phones in their LLVs when delivering mail on foot (Tr. 242, 247).

Carriers use handheld mobile delivery devices (MDDs) to scan packages when they deliver them. Supervisors can use the MDDs to track the location of the carriers and the speed at which they are moving. The Benton Post Office provided training to its carriers when they received the MDDs (Tr. 399-400).

LC-1, LC-2, and LC-3 stated that prior to June 10, 2016, they were instructed they could use the MDDs to text supervisors. LC-2 testified, "We were told that they had a text feature that could be used to text management and also by the employee, and that it had some preset text messages that we could use on the scanner to send to management." (Tr. 121) LC-3 stated a

supervisor had told him he could use the MDD to text the post office in an emergency situation (Tr. 524). Following the June 10, 2016, incident, Benton Post Office supervisors informed carriers they could not use their MDDs to text (Tr. 122).

LLVs

The post office configures routes for *mounted delivery* (for which the carrier delivers mail from the LLV to curbside mailboxes); *dismount delivery* (for which the carrier parks and delivers mail to one or two houses at a time and then returns to the LLV and drives to the next park point); and *park and loop delivery* (for which the carrier parks the LLV at a park point and walks down one side of the street delivering mail to each address and then crosses to the other side to deliver mail, looping back to the LLV) (Tr. 132, 230, 785-86). A loop may include 50 to 60 addresses but typically includes closer to 25 addresses (Tr. 133).

The LLVs are not air-conditioned. They are equipped with a small fan mounted on the dashboard (Exh. J-1, ¶¶14-15; Tr. 95, 23). LLVs have two side windows that can be rolled manually up and down (Tr. 145, 231, 340). The LLV driver cannot roll down the side window opposite the driver's side from inside the vehicle (Tr. 162-63, 489-90).

LC-2's route is designed for mounted delivery. He spends approximately 7 hours per day in his LLV. He walks for approximately 10 minutes per day when he delivers mail to a strip mall and when he has to deliver parcels to the doors of buildings (Tr. 132-33, 145). In warm weather, he drives with the LLV windows rolled down. The interior of the LLV becomes quite hot in the summertime. "[I]f you're on a mounted route, which means that if you're delivering curb line routes from the vehicle, you can feel the heat from the floorboard of the truck coming through the soles of your shoes and your feet will actually get hot from that." (Tr. 97-98)

When delivering mail on foot, LC-2 leaves the windows rolled down as long as he can see the LLV. "The rule is that if you lose sight of the vehicle, you have to secure the vehicle." (Tr. 145-46) Carriers who deliver on park and loop routes must either roll the windows up or "crack" them "an inch or two" when they are out of sight of the LLVs (Tr. 157). When he delivered on a park and loop route, LC-2 testified, "I would roll down the driver's side window after I'd come back from my park and loop on to the next one, so I would have one window down." (Tr. 162) He would not roll down the opposite side window "[b]ecause it would take extra time. . . . It really wouldn't be worth it. . . . You'll have to get out of the vehicle and walk around to roll the window up or down." (Tr. 162-63) LC-1, who delivered on a park and loop route, only rolled down the

driver side window when driving his LLV. He did not roll down the opposite window because “[m]anagement would consider that a time-wasting practice because I would have to roll it back up every time I stopped for a park and loop.” (Tr. 340)

In hot weather, the interior of LC-1’s LLV “was hot enough that you couldn’t leave your hand on the floorboard because it would burn your hand. . . . [M]y water cooler could actually get squishy on the bottom because the floorboard was so hot.” (Tr. 336) He nicknamed his LLV “the oven.” (Tr. 341)

Heat and Hydration

The Benton Post Office provides two water fountains and a water faucet in the employees’ break room. The water fountains “break down quite often.” (Tr. 98, 228, 344) There is also an ice machine, purchased with union funds, which breaks down periodically (Tr. 99, 342). Supervisors occasionally provide Gatorade or electrolyte powders to the carriers (Tr. 101). There is, however, no discretionary fund for unbudgeted items. A former Benton Post Office postmaster stated, “Everything requires approval. . . . [S]ometimes as managers and postmasters, we go out and purchase bottled water to hand it out to employees.” (Tr. 701) It is undisputed the break room water faucet was always in working order and carriers had access to it daily (Tr. 341, 537).

In the spring and summer of 2016, Benton Post Office supervisors gave a number of standup safety talks focused on delivering mail in hot weather conditions as part of the Postal Service’s *Southern Area Heat Stress Campaign* (Exhs. R-5 & R-15; Tr. 258-59, 313-14). Supervisor K.S. testified carriers “were advised to hydrate, avoid eating heavy meals during their route, smoking and tobacco use, alcohol. Mostly hydrate, hydrate, hydrate, and hydrate. You need to drink before, during, and after work. You need to drink small amounts intermittently throughout the day. But to hydrate continuously.” (Tr. 256)

The Benton carriers understood the importance of proper hydration. LC-2 testified “anytime it gets over 80°F, you’d better have you some fluids with you, a large amount of fluids to drink. . . . I would say I probably take three or four bottles of Gatorade. . . . And then I would take a couple of bottles of water. . . . There’s a gas station on my route that I stop and I’ll get tea or something to drink.” (Tr. 131-32) His fluid intake increases when the temperature exceeds 90°F, drinking “way more than a gallon” as he completes his route, “[b]ecause you’re sweating, and all day sweating, and . . . if you don’t, you’re in trouble because you’ll end up having some sort of heat illness.” (Tr. 132) LC-1 testified that on hot days, “I could go through a gallon [of water] easy,

and then I'd have to go refill." (Tr. 343) LC-3 stated he drinks at least 2 gallons of water a day in hot weather (Tr. 535-36).

LC-2 has experienced symptoms he attributed to excessive heat while driving his LLV in temperatures over 90°F. "I've had nausea and dizziness while driving a vehicle because of the heat inside the vehicle. . . . In the summertime, it occurs all the time." (Tr. 137-38) He does not call his supervisor when this occurs. "I just feel that it's my job to get the job done, and that's kind of the way we've been programmed, so that's what I do." (Tr. 138)

LC-3 has never felt ill due to heat when the temperature rose above 90°F, but he has experienced discomfort. "Just being uncomfortable in the heat and exhaustion." (Tr. 522) He has never reported this discomfort to his supervisor because "it's a typical thing. . . . [Y]ou work, you get exhausted. . . . [I]t's never been to a point for me personally where I've felt that I was in danger or needed any type of assistance . . . or medical attention." (Tr. 523)

Time Pressure and Form 3996

The postmaster of a post office is "the overseer for the entire facility, which include[s] all of the employees, the supervisors, custodians, clerks, carriers." (Tr. 699) For budgetary purposes the Postal Service expects each post office to accomplish its scheduled work for all operations within a certain number of allotted work hours (Tr. 691-96). The Postal Service does not allow for adjustments to be made in the allotted work hours due to hot weather (Tr. 746).

If carriers believe they will not be able to complete the route in 8 hours, they submit a form (Form 3996) requesting more time (overtime) or help (auxiliary assistance) to complete delivery. The carriers estimate on the forms how much additional time they will need to complete the routes (Exh. C-24; Tr. 72-73, 76-77, 81). Benton carriers must submit the Forms 3996 by 8:00 a.m., which they do by placing them in a tray on the supervisor's desk (Tr. 76, 404, 747).

Supervisors use a computer program each morning to generate a workload status report based on measurements they enter for the mail volume. The workload status report calculates the time required for individual carriers to case the mail and deliver it on their designated routes (Tr. 249). Supervisor K.S. stated that when carriers submit the 3996 forms, the supervisor "could go over the information with them and either approve or disapprove the auxiliary assistance or the overtime." (Tr. 248) The supervisor would not approve a request for auxiliary assistance if the volume of mail "did not warrant the assistance, or if they were not on the overtime list. If they were on the work assignment list, you did not authorize assistance because they had requested to

work the overtime.” (Tr. 248) Requests for overtime would be denied “[i]f the volume did not warrant the overtime, or if they weren’t going to make dispatch.” (Tr. 248) Supervisor K.S. estimated five or six carriers would submit request forms on an average day, and supervisors would disapprove half of them (Tr. 302). If a carrier submits a Form 3996 that is disapproved, he or she may call the supervisor later that day to request auxiliary assistance or overtime (Tr. 301).

LC-2 testified the 8:00 a.m. deadline does not allow enough time for carriers to determine whether they need to submit the forms because “oftentimes the mail is still being worked, especially now the parcel volume is so heavy. . . . So the letter carrier does not always know how much mail that he’s going to have.” (Tr. 77) LC-2 estimated he submits a Form 3996 “four out of five days on average.” (Tr. 77) He has submitted forms listing excessive heat as the reason for needing additional time to deliver the mail (Tr. 103).

LC-3 delivered on City Route 14 in 2016. He walked approximately 5 hours daily on the route, covering a distance of 11 miles. He spent approximately an hour a day in his LLV (Tr. 499, 501). Typically, he was able to complete his route in 8 hours except on Mondays. His route had “a lot of businesses that are closed on Saturdays, so that the mail for closed businesses with nowhere to deliver the mail on Saturday gets delivered on Monday. It’s held at the post office till Monday.” (Tr. 497) More mail also requires more casing time. LC-3 estimated Monday and post-holiday mail required an additional 15 to 20 minutes to case (Tr. 499). He routinely submitted a Form 3996 each day (Tr. 555).

LC-2 stated requesting more time creates “a contentious situation because the carrier is asking for overtime and the manager does not want to give you overtime. So you’re both approaching the issue coming from different viewpoints.” (Tr. 78) To discourage carriers from submitting Forms 3996, supervisors “will threaten to put a seat in your vehicle and ride it with you” because they assume “you’re not being honest and they’re threatening to go with you so that they can prove that you’re not telling the truth.” (Tr. 79)

LC-2 testified supervisors rushed carriers out the door “almost daily” because “they want you out of the office as soon as they can because when you get out fast, you can get back fast. And that’s what their concern’s with.” (Tr. 85-86) Benton Post Office supervisors have disciplined carriers for taking too long to deliver the mail, citing them for “time wasting practice.” (Tr. 164)

Carriers are contractually entitled to a 30-minute lunch break and two 10-minute breaks (one before and one after lunch) (Tr. 108, 238, 790). The Benton Post Office provides carriers with

a route book that identifies approved locations for breaks that “are along their route, and they have multiple places that they get to choose.” (Tr. 240) LC-3 usually ate lunch in his LLV “to avoid having any travel time associated with” his 30-minute lunch break. “I would park it under a shade tree and open up both doors. And . . . typically leave the key turned on with the dash fan blowing.” (Tr. 501-02)

The Benton Post Office told carriers they may take *comfort breaks* as needed (Tr. 147). A comfort break is usually a bathroom break or an opportunity to refill or purchase beverages. The post office does not limit comfort breaks in hot weather (Tr. 239-40, 790). In standup safety talks given the summer of 2016, supervisors informed carriers “they were allowed to get extra breaks. . . . [An extra break is] a comfort stop. . . . It’s not a contractual break. It’s above and beyond what we already allow them contractually.” (Tr. 301) LC-2 stated he occasionally takes a break just to cool off. He does not ask permission to take breaks to cool off or report taking them to his supervisor afterward (Tr. 148).

Despite the post office’s official position allowing comfort breaks, supervisors discourage carriers from taking them, as well as their contractually guaranteed breaks (Tr. 109-11). LC-2 testified, “I have been asked to not take my lunch break before.” (Tr. 149) LC-1 testified he had been discouraged from taking extra breaks. “[W]e had to get done in 8 hours. Management stressed that to us on a daily basis. And if we went over, we would get in trouble or there would be confrontation back at the office if we didn’t make 8 hours.” (Tr. 368-69) The post office held talks, called “official discussions” with carriers who committed infractions. Benton’s former postmaster explained, “As part of the collective bargaining agreement we’re required to give an employee an official discussion which is putting them on notice of whatever the infraction is. And then there’s progressive corrective action.” (Tr. 821) LC-1 testified supervisors had held five or six official discussions with him because he had exceeded 8 hours to complete delivery on his route. “They were never sympathetic about not making your 8 hours.” (Tr. 369)

CCA is a contract position not entitled to the benefits accorded to city carriers (Tr. 508). CCA-1 testified CCAs are “expected to move faster than regular letter carriers. . . . We’re told not to take our lunches, . . .to skip breaks.” (Tr. 580) He stated, “Even in training, when I went to training, before I was ever even on job training at the plant, the trainer told us in our 90 days [probation period], it’s a good idea not to take your lunch breaks so you can show that you’re performing faster, because if not, they’ll let you go. Or fire you.” (Tr. 584) One supervisor repeated

this to CCA-1 “all the time in the morning. He says you’d better skip break.” (Tr. 586) CCA-1 testified that when he submitted Forms 3996 in 2017, the supervisor “[would] tell you, ‘[Y]ou don’t need that,’ and [he would] try to swipe the form from you. Also, there’s a time where they would hide the 3996s underneath paperwork, but I knew where they were kept on the shelving over by the hot case, so I would just go get one and fill it out and put it on the supervisor’s desk.” (Tr. 590)

LC-2 witnessed an incident when the former postmaster and a supervisor called a carrier into the office because he failed to complete his route in 8 hours. LC-2, as union steward, accompanied him to the office. LC-2 testified the carrier was “very distraught after the meeting occurred,” and he rested his head against the wall (Tr. 139). LC-2 observed the supervisor “taking a photograph of him leaning against the wall. And him and [the postmaster] were laughing at [the carrier].” (Tr. 140)¹⁰

Benton Post Office supervisors discouraged carriers from taking time off. LC-2 testified they “will kind of give you a hard time about it” if a carrier calls in sick, telling the carrier, “You don’t really need to take off. We really need you here today.” (Tr. 118) He testified that after he had called in sick one day, his supervisor called him at home three times and sent a carrier to his house to confirm he was there (Tr. 118). The supervisors also pressured employees to work on their scheduled days off. CCA-1 stated the post office called several times while he was sleeping on his day off. “I was asleep for the first bunch of calls, but eventually I woke up, and I saw that they’d been calling. And they sent a CCA out and knocked on my door. Well, he pounded on my door, woke up my baby.” (Tr. 681)

June 10, 2016, Incident

LC-1 was one of approximately 25 city carriers working for the Benton Post Office on June 10, 2016. He has worked for the Postal Service for 14 years, and he transferred to the Benton Post Office in 2013 (Tr. 173, 308). (LC-1 now works at a post office in another state (Tr. 342).) He was on the work assignment list indicating his willingness to work overtime (Tr. 234).

LC-1 delivered mail on City Route 6, most of which was a park and loop route, with 15 park points (Tr. 310-13). LC-1 spent 45 minutes to an hour daily in his LLV (Tr. 349). He described

¹⁰ The former postmaster acknowledged she and the supervisor were present at the Benton Post Office when the carrier became upset. She denied photographing or laughing at the carrier (Tr. 820). The Court credits the testimony of LC-2 over the postmaster’s denial.

his route as “assisted living, businesses[,] . . . residential, and it was kind of hop outs and then walking. . . .Mainly walking, and then I had cluster boxes in the morning that I would pull up to. But it was maybe like 45 minutes of that.” (Tr. 310-11) LC-1 typically spent 5 hours walking on his route, and he was in direct sunlight about half of that time (Tr. 347). LC-1 carried a pedometer with him. He typically walked 9 to 10 miles daily delivering mail (Tr. 333-34). He estimated approximately 100 houses on his route required him to walk up ten or more steps (“the StairMaster loop”) (Tr. 346-47).

The Benton Post Office expected LC-1 to complete his route in 8 hours (Tr. 319-20). New addresses had been added to the route since 2013. In 2014, the post office conducted a route check and recalculated the delivery time for City Route 6. “[T]hey took off like 20 minutes, and they added 40 minutes, and they still wanted me to get it done in 8 hours.” (Tr. 320)

Although LC-1 often completed his route in 8 hours, he submitted a Form 3996 every day “just in case.” (Exh. C-1; Tr. 405) “[W]e usually fill one out every day. Otherwise, we would get in trouble for coming back after 8 hours. So they would want us . . . to kind of like take a guess on how many parcels we had, how [many] flats we had cased up, and how much DPS we’d have.” (Tr. 322-23)

Supervisors typically discouraged him from submitting a Form 3996. “They usually said that ‘You can do it in 8. We don’t even need this 96.’” (Tr. 325) LC-1 described the supervisors’ tones as “confrontational” and stated, “They kind of degraded you.” (Tr. 326) LC-1 would usually wait until the supervisor left the desk before submitting his form. “That way, I could avoid confrontation.” (Tr. 327)

LC-1 began his workday on June 10, 2016, as he usually did, clocking in at 7:30 a.m., inspecting his LLV, and then casing his mail for the approximately 650 houses on his route. This process generally lasted 1 to 3 hours (Tr. 312). LC-1 was supposed to deliver 1,426 pieces of mail that day, weighing a total of 95.75 pounds (Exh. J-1, ¶¶ 10-11). He left the post office at approximately 8:45 a.m. (Tr. 366).

LC-1 would have either watched the news in the morning or looked at his cell phone to check the predicted high temperature and to see if rain were forecast (Tr. 332). LC-1 was dressed in shorts and a T-shirt that day and wore a baseball cap and sunglasses (Tr. 350). The Postal Service provides an annual allowance to carriers to purchase weather-appropriate clothing (Tr. 432). LC-1 submitted a Form 3996 the morning of June 10, 2016, which supervisor K.S. disapproved (Tr.

202-03). She testified the Postal Service has not trained her to evaluate the impact of the day's temperature forecast when evaluating the forms (Tr. 204-05). She did not notice anything out of the ordinary with LC-1 during her encounter with him that morning (Tr. 251).

LC-1 used to carry his cell phone with him as he walked on his route and listened to podcasts. At some point before June 10, 2016, a supervisor instructed the carriers during a standup safety talk they had to leave their cell phones in their LLVs while they walked their routes. He would check his cell phone for texts from his supervisor when he returned to his LLV or use it to find addresses. "If I had a pivot that I didn't know where it was, I would use my maps to see where it was. Like punch up the address and go do my pivot." (Tr. 358, 363-64) At times he used his cell phone to try to call his supervisor, but the calls were not always answered (Tr. 365, 429).

Nothing unusual occurred the morning of June 10 for LC-1. He took his 10-minute morning break between 10:00 and 11:00 (Tr. 401, 425). He took his lunch break sitting in his LLV (Tr. 368). He explained, "I don't like to travel to a certain place because that would take out of my half-hour break. But I would have my door open and so there'd be a breeze and my fan on." (Tr. 401) By the early afternoon, he had drunk approximately a half gallon of water (Tr. 344).

Around 12:50 p.m., as he was driving to his next park point, he began to experience problems with his vision (Tr. 367). "[M]y vision started bouncing back and forth to the left and right while I was driving. And I was in the turning lane. I was about . . . two blocks away from my next park point. There was oncoming traffic, so I had to wait for them to pass by. Then when they passed by, I felt good enough to drive[.]" (Tr. 351) LC-1 drove to his park point and drank some water. He felt well enough to start the next loop which comprised 11 houses (Tr. 351).

The first two houses were okay. The third house, the mailbox was on the garage . . . so I turned around, put the mail in the box, and when I turned around like the whole world was spinning, and I couldn't walk and I kind of had to catch myself. I stumbled to a light pole that I saw. . . . I grabbed onto that and I started vomiting, and I was still spinning, vomiting, and I could hardly stand up. . . . There was a van beside me, and I managed to make my way over to that, and it was kind of like I let go of the light pole and my body was just falling hard to the right. Then I got onto the van, managed to get my way around that. And I noticed the window was down. So I managed to get the door open and I tried to honk on the horn, but the horn was broke. . . . [I was] sweating. Sweat was just pouring off of me. Still vomiting. Dizziness. My head was spinning. Sweating terribly, and I could see it running down the seats and just like—you know, like I was in the shower pretty much.

(Tr. 353)

LC-1 had left his cell phone in the LLV (Tr. 362-64). He recalled the supervisor's instruction that carriers could text Benton Post Office supervisors using their MDDs (Tr. 360) "I thought I would get help if I sent a text message in an emergency situation to my supervisor." (Tr. 362) He texted the Benton Post Office using his MDD and texted again when he did not hear from a supervisor. He sent a third text using a preset option that requested emergency assistance because he "couldn't type any more buttons to make a sentence." (Tr. 353) He received no response to his texts.¹¹ After approximately 45 minutes, one of the residents on the street came out and asked if he needed help. At LC-1's request, the resident called the Benton Post Office and 911. Emergency medical technicians arrived and transported LC-1 by ambulance to a hospital, where he stayed for three days (Tr. 353-54).

The former postmaster received a telephone call at around 1:30 p.m. alerting her that LC-1 had been taken to the emergency room (Tr. 702). She and supervisor K.S. drove to the location of LC-1's LLV to retrieve it and secure the undelivered mail. Driving the LLV, K.S. followed the former postmaster to the hospital where they briefly visited LC-1 in the emergency room (Tr. 201, 251, 354, 704).

The former postmaster subsequently completed an accident report (Form 1796/301) for the incident. Line 41 of the form asks, "What object or substance directly harmed the employee?" She responded, "Temperature was 91°F." (Exh. C-14; Tr. 706). She testified she believed her response "was necessary information" based on LC-1's initial diagnoses of heat exhaustion (Tr. 706). The former postmaster testified she later determined LC-1 contributed to "an unsafe personal factor" because when he began to feel ill, "he tried to push himself to go on, and he should've, you know, contacted the supervisor or 911." (Tr. 716) The Postal Service did not discipline LC-1 for his actions on June 10, 2016 (Tr. 725). LC-1's admission diagnosis was heat exhaustion but was later changed to vertigo (Tr. 447, 898).¹²

¹¹ No one at the Benton Post Office was monitoring incoming MDD messages on June 10, 2016. Later, the post office found the three messages from LC-1 in the inbox for the MDDs, timestamped 1:01 p.m. ("IMDOWNSENDHELP123OLIVE"), 1:21 p.m. ("NOW127OLIVENEEDHELPNOW"), and 1:30 p.m. ("Police/Postal Inspection Emergency") (Exh. C-15; Tr. 754-55).

¹²Dr. Shirley Conibear, who reviewed LC-1's medical records, stated at the national hearing the actual diagnosis was labyrinthitis. "The labyrinth is three circular tubes that are near your ear and it's the way that you sense where you are in space. So they . . . help you balance, basically." (NH Tr. 3016) Vertigo is a symptom of labyrinthitis. "It is the sensation that either you're moving or the world is moving, kind of like when you get off the merry-go-round, except it's there all the time." (NH Tr. 3016)

LC-1 testified that prior to June 10, 2016, he had never been hospitalized. He described himself as “fairly healthy.” (Tr. 356) He walked an average of 50 miles a week for work and would often go hiking with his family on Sunday (Tr. 356). After LC-1 was released from the hospital, he went through several weeks of physical therapy (Tr. 373). He continued to experience trouble with his balance and used a cane. He had difficulty rising from a seated position (Tr. 357). At the time of the hearing, more than two years after the episode, LC-1 still had trouble walking. “I’ll like to lose my balance and I’ll fall to the right still. I’ve kind of adapted to catch myself before I fall down.” (Tr. 357) He also experienced ringing in his ears (Tr. 357).

OSHA’s Inspection

Compliance safety and health officer (CSHO) John Wolfe works at OSHA’s Little Rock, Arkansas, area office (Tr. 860). In July of 2016 he was assigned to investigate the June 10 incident that resulted in LC-1’s hospitalization. He went to the Benton Post Office and met with post office personnel and union representatives and later spoke with LC-1 (Tr. 861-63). He did not walk LC-1’s route or take temperature readings inside LLVs (Tr. 891-92, 915-26).

The National Weather Service (NWS) does not have a data acquisition site in Benton, Arkansas. The nearest site is located 15 to 20 miles away, in Little Rock, Arkansas, at the Adams Field Airport. CSHO Wolfe obtained Little Rock’s weather data for June 10, 2016, from the NWS (Tr. 864). The NWS data shows the temperature that day at 12:53 p.m. (the approximate time LC-1 began to experience vision problems) was 91°F, with a relative humidity of 42 percent (Exh. C-3).

CSHO Wolfe compared this data with the heat index chart issued by the NWS (Tr. 869-70).¹³ The chart indicates that when the temperature is 91°F and the relative humidity is 42 percent, the heat index (“how hot it feels”) is 93°F. The NWS Weather Forecast Office (WFO) in Little Rock did not issue a heat advisory for June 10, 2016 (Tr. 929).

Based on the NWS’s weather data for June 10, 2016, for Little Rock, Arkansas, and NWS’s heat index chart, CSHO Wolfe concluded Benton Post Office carriers “were exposed to heat stress while working delivering the mail” that day (Tr. 888). As a result of his inspection, CSHO Wolfe recommended the Secretary cite the Postal Service for violating the general duty clause by

¹³ The Secretary did not move to admit the NWS heat index chart in this proceeding. It was admitted in the other four proceedings and was the subject of expert testimony at the national hearing.

exposing carriers “to the hazard of excessive heat while walking and delivering mail in an outdoor environment.” The Secretary issued the Citation on October 14, 2016.

V. TESTIMONY ADMITTED IN THE SOUTHERN AREA CASES

The Southern Area is one of the seven areas into which the Postal Service divides the United States for regional delivery (Exh. J-1, ¶¶ 3-4). Three of the five post offices in the cases before the Court are located in the Southern Area. The parties agreed the testimony of Daniel Penland, the Postal Service’s manager for the Southern Area safety department, is relevant to the three Southern Area cases. The Court ruled Penland’s testimony in the hearing for Docket No. 17-0023 in Houston, Texas, is also admitted as part of the record in the present case and the San Antonio case (No. 16-1713) (Tr. 1005).¹⁴

The Southern Area comprises Arkansas, Texas, Louisiana, Oklahoma, Mississippi, Florida, and a portion of Georgia. Approximately 33,000 postal employees work in the Southern Area. Daniel Penland has worked for the Postal Service since 1986 and has been the manager for the Southern Area safety department since November of 2011 (No. 17-0023 Tr. 303-04, 313-14). Penland summarized his duties. “I work with all the districts in the Area Office and Headquarters to ensure all the safety programs and assist the districts in implementing those safety programs. We also help develop and help the districts analyze accident data to help reduce employee injury. We also work with OSHA compliance, inspections and monitoring, as well as working with the unions to ensure all the safety of the employees is met.” (No. 17-0023 Tr. 310-11). Penland was aware that in 2015 at least 119 postal employees in the Southern Area reported sustaining heat-related illnesses while working. In 2018, there were at least 77 such incidents (No. 17-0023 Tr. 329, 334).

In April of 2016, Penland issued a letter to postal operations in the Southern Area with attached materials for the *Southern Area Heat Stress Campaign* (No. 17-0023 Exh. C-2; No. 17-0023 Tr. 329). He developed the campaign to “help improve the awareness of our employees about a climate condition that happens every year. . . . To heighten the employees’ awareness and make them aware of things that they may be able to do and perform to improve their ability to work in that climate condition.” (No. 17-0023 Tr. 330) Employee training in the *Southern Area Heat Stress Campaign* was not mandatory (Tr. 331). Penland explained the difference between a Postal Service

¹⁴ References in this decision to testimony and exhibits from the Houston hearing are indicated by *No. 17-0023* followed by the transcript page(s) or exhibit number.

safety program and a safety campaign: “[W]hen I put out a program, it’s usually related to a required element. A campaign is an awareness level. . . . The heat element was a campaign informational awareness.” (No. 17-0023 Tr. 333)

What the intent of the campaign was to provide a wealth of information in different media forms. As you can see when you look through the campaign, there were videos in there, there were PowerPoint presentations. There were links to other outside data sources. There were postings. There were just informational standup talks on a number of different elements that all can relate to a possible employee experiencing heat stroke or heat stress. All of these things could help that employee prepare themselves. . . . But none of it was mandatory.

(No. 17-0023 Tr. 374-75)

Penland stressed the importance of acclimatization for carriers, which he defines as preparation “for the heat level that you’re going to be working in, whether it’s proper hydration, proper clothing, being aware of the surroundings.” (No. 17-0023 Tr. 341) Penland places the primary responsibility for preventing heat-related illnesses on the carrier. He stated it is the policy of the Postal Service “to accommodate medical restrictions as best as possible.” (No. 17-0023 Tr. 345)

Penland does not believe the temperature the day of any given reported incident is a relevant factor. “It’s how each individual person identifies with that heat and the heat level itself is not necessarily the concern. It’s how that person can deal with that heat and how that heat level affects them. I can be affected by a heat level of 80 degrees or somebody could be out there working in 100 and have no effect. So the temperature itself is not the issue, in my opinion.” (No. 17-0023 Tr. 352-53) He listed factors he did believe are relevant to heat-related incidents:

Had [the carriers] eaten properly that day? Had they provided hydration the night before? Had they had a high alcohol intake the night before? Were they on medication? Were they properly dressed? Were they wearing a hat or was the sun beating down on their head? There's lots of different elements that are part of an investigation where the heat temperature or the temperature outside itself to me is irrelevant because that's a climate condition.

(No. 17-0023 Tr. 353-54)

Penland was dismissive of the relevance of the heat index chart for the Postal Service. “I believe it would be valuable as information to the employee. As far as eliminating future injuries, I do not see it has a high value, no. Again, it's more of a condition of what's going on with that employee versus the temperature outside because temperatures are so much different. . . . Heat itself I do not believe is a hazard, no. I believe it is a climate condition.” (No. 17-0023 Tr. 354-55)

Penland discounted the importance of heat in the reported heat-related incidents, estimating that as many as 40 percent of the reported incidents were not, in fact, due to high temperatures on the day they occurred.

Q.: Mr. Penland, I think you were testifying about the fact that some of the reported illnesses due to heat may have not been due to heat, correct?

Penland: Possibly, yes.

Q.: Okay. And have you investigated what percentage that is?

Penland: The exact percentage, no. I just know that there are--when we look at cases, we want to look and see if the factors are present. And we always want to look at the root cause of the case. So sometimes during that root cause analysis, we will make determinations that the heat maybe is not--wasn't the root cause. . . . And maybe it's a diabetic reaction. We don't know.

Q.: Okay. And have you gone back and done that analysis?

Penland: The specific analysis, no, but we've done-- we've done the root cause. When you talk about analysis, I refer to that as the general -- all of the cases that we're dealing with versus just those specifics. We do go into the specifics on each individual case, especially the more severe ones.

Q.: Okay. So have you gone back and made some determination that -- I mean, have you gone back and looked at the number that you set out in April of 2016 and determined what amount were reported as heat, extreme heat, when the root cause was something predominantly else?

Penland: I've looked at it, and I could estimate the percentage of about 40 percent.

Q.: Okay. And you have looked at all 119 injuries from 2016 and --

Penland: No, I haven't. That's why I estimated. No, ma'am, I have not delved into each one of these 119. But a cursory review gives -- leads to an estimate of about 20 percent [*sic*].

Q.: Okay. And what did you do in this cursory review?

Penland: I would review whether or not this case was reported with the employee was working indoors or outdoors, first. Then I would look at the occupation that the employee was working in. How much control did they have over their climate?

(No. 17-0023 Tr. 380-83)

Penland noted OSHA has not promulgated a specific standard addressing excessive heat and testified he did not consider hot weather an appropriate condition for safety regulation. "When you're dealing with the climate, . . . it literally changes from block to block, from city to city, and it's -- it's the natural climate. Also, the other thing that when you look at a hazard, I've been taught through my safety aspect is we work the processes to eliminate that hazard. Again, we can't control

the climate. So we will make people aware because the – the climate affects each individual person differently.” (No. 17-0023 Tr. 392)

VI. THE NATIONAL HEARING

Joint Stipulations

The national hearing was held from February 25 to March 12, 2019, Washington, D.C. At the beginning of the hearing, the Court admitted the parties’ statement of joint stipulations into the record:

1. In the following Fiscal Years (FY), the Postal Service’s total revenue was:

2016 \$71.498 billion

2017 \$69.636 billion

2018 \$70.660 billion

2. In the following Fiscal Years, the Postal Service’s total operating expenses were:

2016 \$76.899 billion

2017 \$72.210 billion

2018 \$74.445 billion

3. In the following Fiscal Years, the Postal Service’s net loss was:

2016 \$5.591 billion

2017 \$2.742 billion

2018 \$3.913 billion

4. As of September 30, 2018, the Postal Service employed approximately 497,000 career employees and approximately 137,000 non-career employees.

5. In FY 2016, the Postal Service employed the following:

170,885 city delivery carriers

40,436 city carrier assistants

68,261 career rural delivery carriers

53,183 rural carrier associates

6. In FY 2018, the Postal Service employed the following:

168,199 city delivery carriers

42,115 city carrier assistants

70,852 career rural delivery carriers

59,183 rural carrier associates

7. In FY 2016, the Postal Service had approximately 144,571 city delivery routes and 74,724 rural delivery routes.

8. In FY 2018, the Postal Service had approximately 143,358 city delivery routes and 78,737 rural delivery routes.

9. In FY 2016, the Postal Service managed a combined total of approximately 31,585 post offices, stations, and branches.

10. In FY 2018, the Postal Service managed a combined total of approximately 31,324 post offices, stations, and branches.

(NH Exh. J-100; NH Tr. 11)

Overview of the Postal Service's Operations

David Williams Jr. has been the chief operating officer and executive vice president for the Postal Service since February of 2015. He is responsible for all operations required to process, transport, and deliver mail (NH Tr. 1728, 1746). He explained the Postal Service's operations are divided into three primary sectors: network operations, delivery operations, and retail and customer service operations (NH Tr. 1774-75).

Network operations cover mail processing plants where mail is sorted, processed, and distributed to some level of ZIP Code order (NH Tr. 1775-76). Network operations include the surface and air transportation that is coordinated with the distribution centers and post offices throughout the nation. The Postal Service coordinates surface transportation with the assistance of over 1,900 contractors and covers approximately 1.9 billion miles a year (NH Tr. 1774-76). It relies on "a vast air network," which includes 90 airplanes during the day and 140 at night provided by FedEx, as well as planes provided by UPS (NH Tr. 1760). The Postal Service also uses commercial airlines (mainly Delta, United, and American) to transport mail (NH Tr. 1779). The extensive transportation network is necessary due to the Postal Service's unique mandate to deliver to every address in the United States.

[A] lot of transportation is involved in moving product because of the complexity of our network, the fact that we go everywhere. We go everywhere because our mandate is to serve every American, no matter where they live, no matter what community they're in. And the connectivity that's required to make that happen involves a very complex, very sophisticated transportation network. We spent about \$7.9 billion a year on transportation, so a significant spend. It's the second-largest spend, and 11 percent of our expenses are involved in transportation.

(NH Tr. 1780-81)

Nationwide, delivery operations require city and rural carriers to complete approximately 226,000 routes 6 days per week (NH Tr. 1783-84). The Postal Service uses the concept of “FirstMile” to identify the initial contact the customer has with the Postal Service during delivery operations. A customer wanting to send a letter puts a stamp on it, places it in the household mailbox, and raises the red flag. The raised red flag “is a signal to our carrier workforce that there is mail to be collected. . . We also have a FirstMile component at our post offices. . . [T]here’s a slot where they can drop mail into any one of approximately 31,000 post offices.” (NH Tr. 1785-86)

Retail and customer service operations also involve a FirstMile component when customers buy stamps or mail packages at post offices. Williams stated the Postal Service has the largest retail footprint in the United States, with more retail units than Starbucks, Walmart, and McDonald’s combined. Service and sale associates (SSAs) work in the fronts of the post offices and interact with customers while postal clerks work in the backs sorting mail (NH Tr. 1787-89).

Williams expounded on the scope and complexity of its operations.

I can't think of any network that is as complex as ours. You think about all the touch points that we have in our network, every 226,000 carriers, 31,000 post offices, 285 processing and distribution centers. Back through our network of transportation, whether it's air or surface, 2 billion miles. Airplanes that are flying all over the country, connecting that promise and that thing, that message of sympathy and love, transactions, educational material to anybody else in the United States or our territories, even the world. We deliver 47 percent of the world's mail.

So significant, significant operational footprint that we have, supported by a tremendous amount of complexity to make sure that we're delivering the promise of when you put that stamp on that birthday card for one of your loved ones, they're going to get it.

(NH Tr. 1791-92)

In order to ensure its operations run smoothly and punctually, the Postal Service implements “the 24-hour clock” as an organizing principle. “[W]e have critical points on the clock, developed to make sure that we're hitting the mark, all to achieve on-time service to points. Our mission to provide prompt, reliable, efficient service is based on this 24-hour clock. And it's critical.” (NH Tr. 1795)

The clock starts with carriers retrieving mail at the FirstMile. At the end of the workday, the carriers return to their post offices and place the collected mail in containers that are loaded onto trucks to transport the mail to processing and distribution centers. The operational process starts with cancellations, during which the stamps on mail are marked to show they have been

used. The Postal Service expects 80 percent of all collected mail to be canceled by 8:00 p.m. Aligning the cancellation process with the 24-hour clock is crucial for the Postal Service's overall operations (NH Tr. 1795-97). "[T]hat very first step is highly important because any variation in the very first processing step, it could be a slight variation, but that slight variation creates greater variation at the next step. It creates even larger variation on the third step. Fourth step, even larger. By the time you get to the last step, which is the delivery, we call it the bullwhip effect. A small variation at the front end creates this huge swing of variation at the back end." (NH Tr. 1797)

The next step is the outgoing primary processing, where mail is sorted to a destinating plant based on the first three digits of the ZIP Code.¹⁵ This step needs to be completed by 11:00 p.m. to align with the 24-hour clock. A second sorting is completed by midnight (NH Tr. 1798-1800). "[A]t midnight, across the country, all this mail that's been collected, the mail that's received over a retail operation, mail that you have put in your mailbox to be collected by the carriers, mail that was inducted into our plant operations by any one of our mailers that have discounts, that so some level of sort, all of that has to take place by midnight." (NH Tr. 1800-01)

After the mail is sorted, it must be assigned to transportation by 2:00 a.m. "No wiggle-room on in that. Trucks have to leave. Our entire surface network has been designed by the transport time that it takes to go from point A to point B. Can't bend time; can't bend distance. . . [T]his number is fixed in our operating window. By 2 o'clock we have to have that mail assigned. . . [P]lanes and trucks have to leave on time. That is the mark that has to be made." (NH Tr. 1801-02)

Once mail reaches its destinating plant, the incoming processing begins. Mail arrives throughout the day and night, but it must be processed by 3:00 a.m. because that is the time postal employees start delivery point sequencing (DPS). DPS must be completed by 6:00 a.m. Priority mail takes longer and is not sorted to DPS but is sorted to a specific post office. It must be finished by 4:00 a.m., when trucks leave the destinating plant to transport mail to the post offices. Once the day's mail has arrived at the local post office, it must be delivered to the intended address by 6:00 p.m. that day (NH Tr. 1803-06). "[W]e want to get our carriers off the street by 6:00 p.m. And that's important because the trucks have to come back from the post office, back to the originating

¹⁵ "Destinating plant" is Postal Service nomenclature for the facility receiving mail that will be sorted and transported to local post offices and from there delivered to its intended address.

processing plant so we can get cancellations done by 8:00 p.m., 80 percent of them.” (NH Tr. 1806)

Finances of the Postal Service

The Postal Service originated in 1775 when the Second Continental Congress appointed Benjamin Franklin its first postmaster general. President George Washington signed the Postal Service Act in 1792, creating the Post Office Department. It became a cabinet-level department and transitioned to an independent agency in 1971 under the Postal Reorganization Act of 1970 (NH Tr. 1747-1750). In 2006 Congress passed the Postal Accountability and Enhancement Act (PAEA) which, Williams stated, “created some business model changes for the Postal Service, split our products into two product types, competitive products and market dominant products, [and] placed some restrictions on pricing for market dominant products so that we could no longer rise our rates beyond [the Consumer Price Index,] CPI.” (NH Tr. 1751)

The PAEA requires the Postal Service to prefund the Retiree Health Benefits Fund (RHBF) annually. Williams stated this requirement “really is a millstone around the Postal Service’s neck in terms of finances. The manner in which we’re required to prefund that obligation is one that I don’t think the vast majority of companies or any other government agency is required to do.” (NH Tr. 1751-52)

Jim Sauber of NALC¹⁶ agreed the prefunding obligation is “really the central driving force of Postal Service’s finances. . . . Most companies just pay their retiree health premiums on a pay-as-you-go basis for their current retirees. This law added an additional obligation to the Postal Service, not only to pay their existing retirees’ health and premiums, but to pay in advance, decades in advance the cost of future retiree health benefits.” (NH Tr. 894-95) The Postal Service operated at a loss in 2016, 2017, and 2018 (NH Tr. 890-93).¹⁷

This prefunding mandate cost the Postal Service \$9.1 billion in 2016, \$4.3 billion in 2017, and \$4.5 billion in 2018. The year 2016 “was the last year in which the Postal Service was required

¹⁶ Jim Sauber is the chief of staff to the president of NALC since 2002, first for Bill Young (until he retired in 2009) and then for Fred Rolandro. He manages NALC’s professional staff, which includes staff in the areas of politics, legislation, communications and media relations, and research. Sauber is familiar with all publicly available information about the Postal Service, the Postal Regulatory Commission, and the collective bargaining rights and benefits programs of carriers (NH Tr. 871-74).

¹⁷ The parties stipulate, “In the following Fiscal Years, the Postal Service’s net loss was: 2016: \$5.591 billion; 2017: \$2.742 billion, 2018: \$3.913 billion.” (NH Exh. J-100, ¶ 3)

to prefund their retirees' health, but also out of their own operating budget pay for current retirees' health benefits. Starting in 2017 and going forward, they can now use the fund that they've set aside for these prefunding payments, which . . . has nearly \$50 billion in it." (NH Tr. 896-97)

Since 2010 the Postal Service has been unable to meet the RHBF payments. "They have to report it as an expense, but then it gets reported as an additional liability on their balance sheet." (NH Tr. 897) Because the Postal Service is a federal agency and not a private company, it cannot file for bankruptcy. "So this has become the center of all the discussions about postal reform legislation, is what to do, how to reduce or repeal this prefunding burden." (NH Tr. 898) If the unpaid amounts for the retiree health benefits were removed from the budget statements for 2013 to 2018, the combined operating income for those years would be \$3.8 billion (NH Exh. C-135; NH Tr. 899-903).

Sauber explained the retiree health benefit is not a debt owed to a third party.

[T]his is not like defaulting on your mortgage if you don't make these payments. It's like if you're in tough times and you stop putting money into your kid's college fund. It's a future obligation and a future liability that you're going to have, but nonetheless it's out there and just by law Congress has decided that the Postal Service and only the Postal Service -- no other private company has to do this, has to prefund retiree health.

(NH Tr. 903-04)

The Postal Service is an agency of the federal government and, as such, does not file taxes. It is required by the Securities and Exchange Commission to file annual 10-K reports (NH Exh. C-131; NH Tr. 874-75). The Postal Service is funded entirely by the sales of postage and stamps—it receives no revenue from federal taxes "with one small exception." (NH Tr. 876) Market dominant services (MDS), which include "letters, invoices, statements, [and] marketing mail," are items for which the Postal Service is the main provider (NH Tr. 877). The Postal Regulatory Commission (PRC) permits the Postal Service to raise rates once a year for MDS, indexed to the CPI (NH Tr. 878) The Postal Service increased rates in January of 2019 by 2.5 percent and estimated it would "generate approximately \$891 million in annualized income." (NH. Tr. 881)

Congress also provides a "sort of safety valve" for circumstances where higher rate increases are deemed necessary, called "exigent rate increases" that are "above and beyond the CPI." (NH Tr. 881-82). In 2011 or 2012, in the aftermath of the Great Recession, the Postal Service experienced a severe drop in mail volume. It petitioned the PRC for a 4.3 percent exigent rate increase above the CPI, which the PRC granted in December of 2013. The exigent increase was

temporary, staying in effect until the Postal Service recovered \$4.6 billion. It expired in April of 2016 after meeting that goal (NH Tr. 882-83).

The Postal Service also raises revenue by offering competitive services in the categories of priority mail, priority mail express, first-class package service, and parcel select. It has more flexibility in setting the rates according to market conditions for competitive services (NH Tr. 883-85). Sauber stated competitive services have given an economic boost to the Postal Service. “There was a booming, booming growth in e-commerce, and so the demand was providing the ability for the Postal Service to raise their rates. The demand was also raising their costs too, so that's in part why they did these rate increases.” (NH Tr. 890) The Postal Service raises about \$21.5 billion of its annual \$71 billion revenue from competitive services. In 2018, approximately 4 percent of the total number of pieces carriers delivered were categorized as competitive services (NH Tr. 886-67). In January 2019, the Postal Service implemented a 7.4 percent increase in its competitive rates (NH Exh. C-131; Tr. 887).

Another anomaly of the Postal Service’s business model is its partnership with its direct competitors. Williams stated, “[W]e rely on FedEx and we rely on UPS, but we also compete with them. So in the package market there is a lot of competition, as you might imagine, with two big package delivery companies like UPS and FedEx. So within the competitive product line, most of the products and services are around packages.” (NH Tr. 1753) The Postal Service is committed to meeting service standards for mail delivery, meaning the transit time for different types of mail is predictable. First class mail has overnight, 2-day, 3-day, 4-day and 5-day service standards (NH Tr. 1756). The Postal Service recognizes its customers rely on its promise to meet its service standards for both business and personal reasons.

[W]e have a 2-day service commitment for first class mail if you're mailing within a 6-hour drive time within the United States, 2-day service standard. You're expecting to have that mail delivered in 2 days. If you're mailing a bill or if you're synchronizing when you're mailing a birthday card to your mother, and you know she lives within six hours of you, you know you've got 2 days to get that mail piece delivered, the promise that we're making our customers through our service standards.

And cataloguers plan their promotions around expected delivery times in the home. They staff up their call centers expecting when we're going to deliver a catalogue in somebody's home so that when you receive a catalogue, you're calling up the call center and making an order.

So our customers are counting on us. Amazon is counting on us to make their 2-day promise. Cataloguers are staffing up and counting on us to deliver

catalogues so that whatever product is being sold can be bought. And if you've got personal correspondence, business correspondence or paying your bills, we've got a promise that we're going to deliver on that promise. When those expectations aren't met, our customers can get quite agitated, right. If you make a payment to your mortgage and it's not received on time and you get hit with a late fee, that's a major issue for our customers. If you staff up your call center and expecting a lot of calls because you've entered product into one of our plants and we don't deliver that timely, number one, you're not getting the sales that you're expecting. You've paid for a lot of people to be in call centers that aren't taking calls.

(NH Tr. 1762-64)

For certain guaranteed types of mail, the Postal Service must refund the customer's postage if the mail is not delivered in the promised time, which, Williams stated, is a financial penalty. However,

the bigger penalty for us is when customers use us and we don't deliver on the promise that we're making, they go to alternative places, right? We're competing in every single product line. It's not just the competitive products where people traditionally see us as competing with United States Parcel Service or FedEx.

We're competing now with our own customers. We're competing with Amazon. Amazon is creating their own delivery network. We're competing with electronics. . . . If you go on any social media app, whether it's Facebook, whether it's Instagram, whether it's email, you're getting hit multiple, multiple times by an unlimited number of companies that are using electronic media to deliver their message, whether it's a business message, whether it's a transaction, whether it's a bill payment, bill presentment, advertising piece, if it's periodicals, online periodicals.

So even within our market dominant products, we're competing in every product, and service -- it's very hard to compete when somebody can deliver an email to your account free and when they want. . . . But if we're not delivering on our standards and we're losing customers, we call that churn, so churn is a term that we use. Last year we lost \$5.5 billion for customers that left us. About 1.8 billion of that was because of service-related issues.

So when we're not delivering on service, promises that we're making when we ink deals with some of the major e-commerce companies, they leave us. Some of them left us this past Christmas season when we were having difficulties in certain pockets of the country. We lost business because some of these e-commerce companies diverted packages that we would normally have received and were expecting to receive, they diverted them to some of our competitors.

(NH Tr. 1765-67)

NALC and Heat Stress Awareness

Manuel Peralta works in Washington, D.C., as the national director of safety and health for the NALC. NALC, with approximately 295,000 active and retired members, is "the union that has exclusive jurisdiction to represent city carriers throughout the country." (NH Tr. 43)

In July of 2012, Peralta learned a carrier in Independence, Missouri, “had died, and it was believed to have been related to the heat.” (NH Tr. 52) In December of 2012, the Secretary issued a willful citation to the Postal Service for a § 5(a)(1) violation for exposing employees to excessive heat. The Postal Service contested the citation and the case went to hearing in February of 2014.

Peralta attended the hearing presided over by Judge Peggy S. Ball. He observed the testimony of the Secretary’s expert witness, Dr. Thomas Bernard (NH Tr. 52-54).¹⁸ Dr. Bernard’s testimony inspired Peralta to address the issue of excessive heat exposure for carriers.

As a direct result of the testimony of the doctor and the Occupational Safety and Health expert . . . I was stunned over what they explained, how it -- the heat affects the body. . . . The steps that I personally took is, I started to speak with the Business Agent, speak with the other officers, and determined that we had to learn more about the heat, learn more about its effects, learn more about what do we have to do as a craft to prevent our brothers and sisters from getting hurt. A few months later, the judge issued her decision.¹⁹ And in reading her decision, I decided to start writing articles where I specifically made reference to her findings and her opinion. And I started to read more and more and more, including documents that came out from NIOSH and recommendations, and started to put together information and sending it more and more to the field.

(NH Tr. 55-56)

In response to increased awareness of heat stress, the Postal Service and NALC negotiated a memorandum of understanding (MOU) in 2015 (NH Tr. 56, 59). Section 1 of the MOU addresses training and provides:

New letter carrier employee orientation will include the heat stress training identified below. Training will also be provided annually (no later than April 15) to all employees, with regular reminders throughout the summer season by local management.

LMS Course 10019802—Heat Stress Recognition and Prevention (Supervisors and Carriers)

PowerPoint Presentation—Heat Stress Recognition and Prevention (Supervisors to present to carriers). This program is designed as alternative training for those employees without access to the online Learning Management System.

Heat Stress SDOM Video: <http://blue.usps.gov/hr/safety/video/heat-stress.htm>

¹⁸ Dr. Bernard testified in the national hearing of the Postal Service cases before the Court.

¹⁹ Judge Ball found the Postal Service committed a willful violation of § 5(a)(1) by exposing its employees “to recognized hazards related to working outside during periods of excessive heat” and assessed a penalty of \$70,000. The Commission declined to direct the case for review, and the decision became a final order. *United States Postal Service*, No. 13-0217, 2014 WL 5528391 (OSHRC Oct. 24, 2014). The Postal Service appealed to the United States Court of Appeals for the Eighth Circuit, but voluntarily dismissed its appeal on May 28, 2015 (NH Exh. C-189).

Stand Up Talks and Info Pak Information (attached as an appendix).

(NH Exh. C-106, p. 3) The Postal Service did not make the heat stress training mandatory for supervisors until May of 2018 (NH. Tr. 61).

The MOU was signed on May 5, 2015, and applies to the post office in Independence, Missouri, but states, “While this Agreement applies solely to the Independence, Missouri, Post Office, including its stations and branches, the parties recognize that heat abatement is an essential element of on-the-job safety for city letter carriers in all locations where city letter carriers are exposed to excessive heat.” (NH Exh. C-106)

The second section of the MOU addresses increased supervisory monitoring of carriers when the heat index rises to 103°F:

2) Monitoring Employees

...

[T]o the extent practicable, management will increase contact with employees performing street duties for the purpose of monitoring employees’ well-being on days when the National Weather Service predicts a heat index (air temperature and relative humidity combined into a single value) at or above 103°F. For purposes of this agreement, the combination of air temperature and relative humidity at or above 103°F is deemed an “excessive heat day.” The chart below indicates the heat index system used by the National Weather Service. [The NWS’s heat index chart is depicted.]

(NH Exh. C-106; NH Tr. 147-51)

The MOU includes a section on work/rest cycles, again finding the heat index of 103°F to be a triggering event for additional measures:

5) Work/Rest Regimen

On days where the National Weather Service predicts a heat index at or above 103°F, in addition to their regular scheduled break(s) and lunch break, city letter carriers are encouraged to take additional breaks in designated climate-controlled or shaded areas . . . when necessary to mitigate the impact of excessive heat. Additionally, the parties understand and agree that it may be necessary for individual city letter carriers to take additional breaks when the heat index is under the threshold set above. Individual city letter carriers returning from absence or illness may be especially vulnerable to the effects of excessive heat, and therefore, are especially encouraged to take necessary breaks pursuant to this paragraph. City letter carriers taking an extra break under this provision, using their assigned MDD, send a text message to their assigned facility at the MDD, send a text message to their assigned facility at the beginning of the break (indicating the break location) and another text message at the conclusion of the break. The parties understand and agree that there may be circumstances where a city letter carrier taking a break under this provision may not immediately report the breakthrough the MDD.

(NH Exh. C-106; NH Tr. 151-53)

In 2015, without input from NALC, the Postal Service implemented a heat stress awareness program that supervisors communicated to carriers during standup safety talks (NH Tr. 62-63). Peralta found the program to be “very shallow in the depth of information provided. . . . [I]t’s the limitation of hydrate yourself, avoid certain things, but very little, and none that I remember on acclimatization.” (NH Tr. 63) He also objected to the format of standup talks being used to communicate the information, based on the 5 years he had worked as a carrier in California.

When I was a carrier in Anaheim, I remember being called together for standup talks where the supervisor would read in the most monotonous, boring, uninspiring tone what he was required to read. And it felt like they were making a little checkmark on a piece of paper, telling you to finish up, go back to your case. It was absolutely worthless. So I spoke up because I was very disappointed with the quality of training. And that's one of the reasons that my president later volunteered me for the safety committee.

(NH Tr. 63-64)

Peralta created a form entitled *Initial Heat Injury Report* and distributed copies to the local union branches and posted it on NALC’s website (NH Exh. C-105; NH Tr. 65-67). The purposes of the form are to track heat injuries and to assist injured carriers with claims under the Federal Employee Compensation Act (NH Tr. 67). NALC developed yearly spread sheets to track the heat injury reports (NH Exhs. C-107 (2015), C-108 (2016), C-109 (2017), C-110 (2018); NH Tr. 79-88).

Peralta investigated many of the injury reports and found a pattern emerged.

[I]t surprised me how much pressure the employees were under to keep working. It stunned me that it was a common denominator in most of the cases. Keep pushing and pushing and pushing. We have a heat wave. We know we're affected by the heat wave. . . . It was my understanding that the employees were suffering from pressure to keep pushing forward. When I read the statements, in some of them it was, "I called my supervisor. My supervisor told me to keep going in spite of a standup talk that told us to recognize the symptoms. When we did call, we were forced to keep going." And that happened a lot.

(NH Tr. 70-71) Eventually, Peralta became aware that carriers who suffered heat injuries were subject to disciplinary procedures (Tr. 89, 96).

Peralta attributed the death of a carrier in Medford, Massachusetts, in July of 2015 to excessive heat exposure (NH Tr. 102). He testified regarding the death of another carrier in Woodland Hills, California, in July 2018 on a day when the temperature was 117°F. The carrier “had been off duty for approximately three months. She had suffered an on-the-job injury. I believe

it was either a severely sprained or a broken ankle. She was on medication, off work for three months. That Friday was her first day back.” (NH Tr. 104) Peralta discovered the Postal Service had certified the deceased carrier had undergone heat safety training during a period of time when she was not working.

[D]uring my meeting on May the 15th of 2018 with management, they also told me every single letter carrier in the country will also undergo the LMS training for the heat safety program that we audited in 2015. They specifically put, to me, confirmation that 640,000 employees will undergo that training. Because I was very doubtful that they were going to have everybody go. I said, are you talking every single letter carrier? Well, we're not talking about individually, but in groups. Every single letter carrier and every single supervisor. So as the facts revealed themselves, I am provided with documents that indicated [the deceased letter carrier] was certified as having gone through that training when she wasn't ever at work yet. Her first day at work, she returns and dies, but they certified that she had gone through that training weeks earlier, which was absolutely untrue. They were embarrassed, and then they later, after the fact, corrected their records.

(NH Tr. 106)

LLVs and Air Conditioning

Dr. Thomas Bernard testified regarding the benefits of providing carriers with air-conditioned vehicle.²⁰ The Court found Dr. Bernard qualified, “based on his knowledge, skill, experience, training, and education,” to testify as an expert “in the areas of industrial hygiene and specifically regarding industrial heat stress.” (NH Tr. 808)

²⁰ Dr. Thomas Bernard is a professor in the College of Public Health at the University of South Florida. He has taught there for 30 years. He is the director of the university’s NIOSH- supported education research center (NH Tr. 793-94). He earned a Bachelor of Science degree and a Master of Science degree in mechanical engineering from Carnegie Mellon University and a PhD in occupational health from the University of Pittsburgh Graduate School of Public Health (NH Tr. 795-98). He worked for a time for the United States Bureau of Mines in the post-disaster survival and rescue section. Dr. Bernard worked for 11 years as a senior engineer at the Westinghouse Electric Research and Development Center, focusing on heat stress management in the power industry (NH Tr. 795-96). At the University of South Florida, he teaches master’s degree level students in, he stated, “classes related, broadly speaking, to occupational health and safety, specifically a class in ergonomics, one in physical agents and controls. I teach a class in occupational health and safety management systems and other administrative kinds of topics. . . . I've done a few guest lectures in the intro to industrial hygiene, a couple of laboratory lectures, and I also have a few lectures in service class for the college.” (NH Tr. 794)

Dr. Bernard is certified as an industrial hygienist and as a safety professional (NH Tr. 797). He is a fellow of the American Industrial Hygiene Association (AIHA) and is on the Physical Agents Committee for ACGIH. He was a Fulbright Scholar at the Loughborough University in London. He has published approximately 16 peer-reviewed papers in the past decade, most of them on some aspect of heat stress, and has also contributed chapters to scientific handbooks. Dr. Bernard presents talks and webinars to occupational health researchers and professionals on the topic of heat stress. He has worked with private employers to develop heat stress programs for their employees (NH Tr. 799-802).

Dr. Bernard recommended air conditioning be provided in the carriers' vehicles, and he found it to be technically feasible (NH Tr. 823). The goal of a heat stress program is to reduce the metabolic rate. An air-conditioned space is "more favorable to dissipating heat by sweat evaporation[.] . . . [T]he air conditioning provides a less humid environment, so that's the thing that really helps make it more favorable to evaporative cooling." (NH Tr. 820) Carriers could take breaks in their air-conditioned vehicles instead of spending time driving to air-conditioned rest areas. Air-conditioned vehicles would also assist with the first aid response in the event a carrier recognizes the onset of a heat-related disorder. "[A]n air-conditioned vehicle helps facilitate the recovery so that it doesn't progress into an incident." (NH Tr. 823)

Han Dinh works for the engineering department of the Postal Service as its manager for vehicle engineering (NH Tr. 314). He has a Master of Science and a Bachelor of Applied Science, both in mechanical engineering (NH Tr. 316). He is "the chief technical advisor for the Postal Service when it comes to vehicles. . . . [He is] responsible for the research, development, technology, testing and evaluation, including the specifications for mail vehicles for the Postal Service." (NH Tr. 315).

Dinh testified the Postal Service introduced the LLV to its workforce in 1987 and the fleet of over 200,000 vehicles was fully deployed by 1994 (NH Tr. 317, 347-48). In 2014, the Postal Service began its Next Generation Delivery Vehicle (NGDV) project because by that time the LLVs were from 20 to 27 years old and the costs to maintain and repair them were increasing. "[T]he spare parts have been very hard, difficult to find because General Motors stopped making the spare parts for the vehicle. . . . [The engineering department had] to actually design and rebuild and make the new frame for the" LLVs (NH Tr. 320).

LLVs and NGDVs are purpose-built vehicles with right-hand driving. The Postal Service's engineering department convened a supply conference in 2015, attended by representatives from Ford, General Motors, and Chrysler, among others (NH Tr. 321-22). The Postal Service issued a statement of objectives (SOO) and subsequently selected the top six suppliers to build prototypes meeting the SOO and to deliver them to the Postal Service by the end of September of 2017. The Postal Service began testing and evaluating the prototypes, and that process continued at the time of the national hearing (NH Tr. 323-26). Dinh stated the Postal Service is "planning to have the vehicle go into production assembly lines in December 2021, if everything goes right." (NH Tr.

332) Air conditioning was listed as “optional” at the supply conference, but the Postal Service listed it as a requirement in the SOO (NH Tr. 337-38).

The SOO, updated November 20, 2015, by Dinh, provides:

The vehicles must have air conditioning/cooling systems sufficient to cool the operator’s torso area when seated in the driving position with the driver’s window open, so that the air temperature at the operator’s torso area is maintained at or below 85 degrees Fahrenheit when the outside temperature is 120 degrees Fahrenheit. Cooling is only required in the operator cab.

(NH Exh. C-161; NH Tr. 352-53)

Dinh explained the Postal Service has not committed to deploying air-conditioned vehicles to its workforce but wanted to study its efficacy.

We wanted to study the feasibility of the air conditioning in the delivery vehicle with the window open, with carriers getting in and out all the time. So the intent behind to have a requirement in the SOO codified so that we can have a chance to study whether we can efficiently cool the vehicle with everything open and we go at the extremely low speed. And you probably are aware that all delivery vehicles, from UPS, from FedEx, none of them have air conditioning today in their vehicles. So we wanted to study it.

(NH Tr. 339-40)

Dinh explained the rationale for requiring the capacity for cooling the interior of the cab to 85°F when the outside temperature is 120°F.

My research at the time found out that when the outside temperature 120 degrees, the maximum temperature they can achieve with the AC system is around 70 degrees at the vent where the AC vent is inside the vehicle. So we made an educated guess at the time, if the vent temperature, the coolest temperature at the vent is about 70 degrees and the torso area is far away from the vent because of heat loss between where the vent is and the torso of the driver, so we made an educated guess about 15 degrees. So by the time it gets to the torso with the heat loss -- heat environment coming from the environment, the torso area probably at best can achieve -- optimum temperature would be around 85 degrees. That's educated guess of how the air conditioning system would -- could operate at the time.

(NH Tr. 353-54)

It is Dinh’s opinion that equipping vehicles with air conditioning is a matter of comfort, and not safety, for the drivers (NH Tr. 367-68). He testified the Postal Service had not reached a final decision on whether it would require its NGDV to be equipped with air conditioning (NH Tr. 341, 368-69).

Kevin McAdams works for the Postal Service in Washington, D.C., as its vice president of delivery and retail operations. He agreed with Han Dinh that air conditioning is a matter of comfort,

not safety, and the ubiquity of air conditioning in contemporary vehicles reflects a societal shift in lifestyle. “What’s different today is air conditioning as a comfort feature has become like satellite radio, right? You don’t have a tape deck anymore. It’s just standard equipment. . . . So that decision is really – society has made that decision. The car manufacturers have made that decision for us. But in 1980 that was not an unusual decision [to drive a vehicle without air conditioning].” (NH Tr. 2098-99)

Dr. Aaron Tustin testified regarding the temperatures inside LLVs.²¹ The Court determined Dr. Tustin was qualified to provide expert testimony “regarding occupational medicine in general, heat stress exposure assessments, and the epidemiology of occupational heat-related illnesses.” (NH Tr. 254)

Dr. Tustin concluded the interiors of LLVs were hotter than the outside air temperature after reviewing a report entitled *Postal Vehicle Temperature Test Phoenix District Safety Office 2005* (NH Exh. C-151; NH Tr. 299). The Phoenix report explained the setup and process for the Phoenix test:

The test set-up consisted of taking temperature readings on three days when the temperatures were above normal in the Phoenix area. The first test was to get baseline data on temperatures in a Long Life Vehicle (LLV) with readings on dew point, heat index, percent relative humidity and the outside air temperature on May 19th, 2005. The follow up testing, on May 20th, consisted of gathering data points comparing two LLV side by side measuring one LLV with windows up and the other LLV with windows down 1½ inches to quantify the difference in temperature.

²¹ In 1998, Dr. Aaron W. Tustin received a Bachelor of Science degree in physics from the Massachusetts Institute of Technology. He received a Master of Science degree in astronomy from Harvard University in 2000 (NH Tr. 229). After working for a time in the private sector, Dr. Tustin attended Vanderbilt University Medical School and received a medical degree in 2012 (NH Tr. 230). After completing a year of residency at Johns Hopkins Hospital, he went to Peru for a year to conduct research in epidemiology and biostatistics for the University of Pennsylvania (NH Tr. 231). He then completed a two-year residency program in occupational and environmental medicine at Johns Hopkins Bloomberg School of Public Health and received a master’s degree in public health in 2015 (NH Tr. 233-34). Dr. Tustin is board certified in occupational medicine and is a member of the American College of Occupational Environmental Medicine (ACOEM). He serves as an adjunct assistant professor at the Uniform Services University of Health Sciences (NH Tr. 236-38).

In August 2016, Dr. Tustin began working in Washington, D.C., as a medical officer for OSHA’s Office of Occupational Medicine and Nursing (OOMN) (NH Tr. 226). He described OOMN’s priorities as (1) “supporting OSHA field officers with their investigations” as expert consultants; (2) reviewing annual medical exams of CSHOs to assess their fitness for duty; and (3) “analyzing OSHA’s internal data to try to improve [OOMN’s] guidance that we give to workers and employers.” (NH Tr. 226-27) Dr. Tustin has conducted research and written approximately a dozen peer-reviewed published articles relating to occupational health, including articles published in *The Journal of Occupational and Environmental Medicine*, *The Journal of Occupational and Environmental Hygiene*, and *Morbidity and Mortality Weekly Report (MMWR)*, published by the Centers for Disease Control and Protection (CDC) (NH Tr. 240-47). He has lectured at medical conferences, including the American Occupational Health Conference (AOHC) and the National Occupational Injury Research Symposium (NOIRS) (NH Tr. 247-50).

Additional testing was performed on May 23rd gathering data on temperatures on a static Ford Windstar and 2-ton delivery vehicle; both vehicles closed with windows up. The hypothesis was designed to take accurate measurements of the temperature in postal delivery vehicles to answer the question “Are vehicles any cooler with the windows down 1½ inches opposed to windows closed?” The hypothesis was further tested to find out if the vehicle inside temperature increased 75% within the first 5 minutes and 90% of the temperature increase occurred within 15 minutes.

(NH Exh. C-151, p. 1)

The report summarized the Phoenix test results:

The following conclusions were made from the analysis of the series of tests to compare the rate of rise of temperature in static postal delivery vehicles:

The temperature reached a maximum of 122 degrees inside the LLV at 5 p.m. when the temperature was 101 degrees outside; a temperature differential of 21 degrees. The temperature rose only 4 degrees in the first 5 minutes and 10 degrees within 15 minutes. This did not verify the hypothesis of 75% temperature increase in the first five minutes nor 90% within fifteen minutes. However, the hypothesis did not take into account the constant rise of the outside air temperature during the day. The temperature on the test day ranged from 86 degrees at 10 a.m. to 101 degrees at 5 p.m.

The side by side test of two LLV’s comparing temperatures with the windows closed in one LLV and the windows down 1½ inches in the other show very small difference. The results show that at the maximum temperature the difference in temperature was only 2½ degrees. This equates to only a 2% difference in temperature.

...

In conclusion, this testing shows that having windows down in a parked LLV does not make a significant impact on the inside temperature.

(NH Exh. C-151, p. 3)

Dr. Tustin summarized the results of the temperature test:

They put temperature sensors inside an LLV, both with the windows completely closed and also with the windows cracked open about an inch and a half, and they were comparing the interior temperature to outside temperature. I believe they had several conclusions, but some of the main conclusions that I take away from this were that the interior temperature was always hotter, at least 5°F hotter, than the outside conditions.

(NH Tr. 299-300)

On cross-examination, Dr. Tustin conceded the test was conducted in LLVs parked in direct sunlight in a parking lot in Phoenix, Arizona, with the doors closed and the windows either closed or open 1.5 inches. It took an hour for the interior temperature to increase 21°F, and the interior temperature reached 122°F after the LLV sat in direct sunlight for 7 hours. Dr. Tustin

agreed he could not think of an example in any of the five Postal Service cases where a carrier left an LLV parked in direct sunlight for an hour or more (NH Tr. 650-52). He also acknowledged the Phoenix test did not factor in any cooling effects from a carrier opening the door to reenter the LLV and driving it with the windows down to the next park point (Tr. 653-54).

The Postal Service hired Rodman Harvey as a consultant in the five cases before the Court.²² The Court qualified Harvey to testify as an expert “in industrial hygiene, with specialized expertise in assessing the risk of exposure to excessive heat, based on his knowledge, skill, experience, training, and education.” (NH Tr. 2766)

Harvey found the Phoenix test report to be unreliable. “In reviewing the document, there's errors with regard to definitions of terms. There's nonsensical statements about temperatures increasing by a certain percentage point. There's representations in the conclusions that don't appear to be supported by the testing that was done. And the testing conditions were not very rigorous in terms of standardization or trying to standardize other variables.” (Tr. 2838)

Harvey elaborated on the errors he found in the report:

Q.: You mentioned definitions. Can you be specific about what you found with regard to the definitions?

Harvey: Yeah. On page 4 of that document, there's a section called "Definitions". And it has a definition for "heat stress" and then in parentheses it says, "heat index". And then the definition is primarily a definition of heat index and has nothing to do with heat stress, which is the primary word or phrase being defined.

Q.: Mr. Harvey, I notice on the first page of the document, which is marked 0001085, in the first paragraph, there's a reference to "hypothesis" and then it's got 75 percent and 90 percent. What does that sentence mean?

Harvey: I have no idea what it means. It talks about the hypothesis that the temperature increased 75 percent in a certain period or 90 percent, but the temperature is not an absolute scale. So you can't compare two different temperatures using percentages. For instance, 60 degrees Fahrenheit is not twice as hot as 30 degrees Fahrenheit. So I don't know what the hypothesis was or what they were trying to test.

²² Rodman Harvey is the director of client services for Carnow Conibear & Associates, an environmental health and safety consulting firm in Chicago. He manages the company's industrial hygiene group (NH Tr. 2750-51). Harvey received a bachelor's degree in biology from Lawrence University in 1983, and a master's in environmental engineering in 1986 from the Illinois Institute of Technology (NH Tr. 2745). He is a certified industrial hygienist (NH Tr. 2747-49).

Q.: I believe that the document describes – I guess what I would call the testing conditions for the various vehicles. Did you find any flaws in the testing methods?

...

Harvey: [I]n describing the methods when they tested the LLVs, they made a point to point out that the LLVs were both pointing south so that the effect of the sun would be the same on each. And then later they test two other vehicles and one was pointed to the south and one was pointed to the west. So the effect of the sun would be completely different.

Q.: If you look at the first chart or graph or whatever it is on the first page, which begins 0001085, is this trying to tell us the temperature with windows open or windows closed, or what is this trying to communicate? Based on your review of this.

Harvey: I don't know that I can tell the condition of the LLV from what's written here.

(NH Tr. 2838-40)²³

Form 3996 and Time Pressure

Jennifer Thi Vo works as the Postal Service's director of city delivery (NH Tr. 2583). She has worked for the Postal Service for 25 years and has held a variety of positions, including post office supervisor (NH Tr. 2584). She oversees all work aspects of city carriers and the approximately 143,000 routes on which they deliver. The Postal Service employs approximately 161,000 full-time city carriers and 2,800 part-time employees, plus approximately 44,000 CCAs (NH Tr. 2587-88).

²³ The Court finds the Phoenix test report to be unreliable and accords it no weight. In addition to the flaws pointed out by Rodman Harvey, the record establishes the Phoenix testing conditions do not reflect the actual working conditions of carriers who drove LLVs in Benton, Arkansas.

The Court does credit the testimony of the carriers in this proceeding who testified temperatures in the interiors of LLVs are hotter in the summertime than outside temperatures. The evidence, however, falls short of establishing the existence of an excessive heat hazard in LLVs in this case for two reasons. First, there is no evidence in the record verifying the accuracy of the carriers' subjective estimates of the LLVs' increased interior temperatures in comparison to the outside temperatures. There is, therefore, no evidence establishing the magnitude of the increase in the interior temperatures of the LLVs on the days referred to by the carriers.

Second, the Citation alleges the Postal Service employees were exposed to hazards "while walking and delivering mail in an *outdoor* environment." (emphasis added) The testimony of the carriers establishes the conditions that make driving an LLV uncomfortable and potentially hazardous (including the greenhouse effect created by the large windows and the engine heat rising from the floor) are separate from the conditions attendant to delivering mail outdoors on foot. "The Secretary must draft a citation 'with sufficient particularity to inform the employer of what he did wrong, i.e., to apprise reasonably the employer of the issues in controversy.'" *Alden Leeds, Inc. v. OSHRC*, 298 F.3d 256, 261 (3d Cir. 2002) (quoted case omitted); see 29 U.S.C. § 658(a) (requiring that citations "describe with particularity the nature of the violation")." *L & L Painting Co., Inc.*, No. 05-0050, 2008 WL 4542427, at *4 (OSHRC September 29, 2008). The Court concludes evidence relating to the alleged hazard of excessive heat or high heat levels in LLVs is not probative of an alleged excessive or high heat hazard related to working outside.

Vo has experience as a post office supervisor receiving Form 3996 requests from carriers due to predicted hot weather. She explained the process she used with the requesting carriers to determine whether she approved or disapproved the requests.

I supervised in Memphis during the summer of 2014. . . . [I]t's hot, so on the 3996 they asked for overtime based on the heat. . . . What I looked at and what I try to teach is that each one of the 3996s are different because the employees are different and the routes are different. So the first one that I disapproved was for 30 minutes and it had heat. The conversation with the employee is that they leave their route at 10:00 o'clock and then usually are back by 4:00. But that day they were leaving at 9:30, so they're leaving an extra half an hour early. So the conversation that I would have is, "I'm disapproving your 3996. You asked for 30 minutes "O[vertime]" due to the heat. I do think that you might take the 30 minutes but you're leaving a half an hour earlier. I'm not going to give you any extra work." So I would disapprove that.

The second one might be different. 30 minutes, and I remember this one. He asked for 30 minutes. He was leaving on time, so he's leaving at 10:00. He's supposed to leave at 10:00. He put heat, but his building, his route is 95 percent in the building. It's in the Civic Center, which is air-conditioned, which the heat should not affect it. But usually what I did on that was I disapproved the 30 minutes. I gave him 15 minutes and told him that I would approve it. Use it if he needs it. If he needs more, let us know. But that's the conversation.

The last two we approved because they were out on the street. They were leaving at the same time, so we went ahead and approved it.

On those three cases, none of those employees worked overtime. It's really about the communication and talking to them. If they need it, they need it. If they don't -- 3996 is just a form to kind of determine if you need something.

It's going to change once you get on the street. It might be that they used 35 minutes. It might be they used 15 minutes, but every single form is not the same, every route is not the same and every carrier is not the same.

So that supervisor is really the key because they're the ones that are talking to employees every day. . . . [Form 3996 requests are] made at the beginning of the day, but all of the stations and branches usually have a requirement to call by a certain time. So if you know -- so at my stations, they're required to call at 3:00 o'clock. So they know -- it doesn't mean wait until 3:00 o'clock to call. It means that as soon as they find out that there's an issue there, give us a call.

We have three options. The supervisors that pick up the phone have three options when they call. The first option is go ahead and use the overtime. Second option is I'll send you some help. And the third option is bring back the mail.

Now, there's situations. Just like there's different carriers, there's different supervisors out there that's going to need training and stuff that will just say, "Continue going." If it's going to continue going, they have approved that overtime.

(NH Tr. 2597-2600)

When asked if it is proper procedure if a supervisor "just had their employees put a 3996 in a folder, doesn't look at them, disapproves them," Vo responded, "It would be. . . . A 3996 is—

if it doesn't get approved or disapproved, it's automatically approved. So if you put in a request for overtime and the supervisor doesn't address it or any point, then the overtime's approved." (NH Tr. 2672)²⁴

Vo testified a carrier's medical condition could affect the time needed to complete a route (NH Tr. 2636). When a carrier notifies the post office in the morning he or she is not feeling well, the supervisor can allow extra time for overtime or assign part of the route as a pivot. If a carrier is on the street and calls to say he or she is not feeling well and may require extra time to complete the route, Vo stated, "We usually won't have an issue with that." (NH Tr. 2637)

On cross-examination, Vo was asked about testimony from carriers in the local cases indicating their supervisors consistently discouraged them from submitting Forms 3996 or taking lunch or breaks due to hot weather. She responded, "So what I heard from the testimony is that the employees felt they were pressured to be done on time. And I don't see that to be the case of my experience and what I see as in data. These looked like isolated incidents. But I don't see -- I haven't seen any factual, just what I've heard on it. But I don't think that that is representative of the Postal Service." (NH Tr. 2728)

Vo presents an idealized description of conversations between supervisors and carriers regarding Form 3996 requests. The pleasant, civilized discussions she envisions, based on mutual respect between carriers and supervisors are not, however, the norm. Rather than being "isolated incidents" when "employees felt they were pressured to be done on time," the records in the five Postal Service cases, across five cities, demonstrate rural and city carriers experience near-constant pressure to complete their routes faster and to discourage them from taking breaks, reporting injuries or illnesses, or calling in sick. In this case, carriers testified at length that when they submitted 3996 forms, supervisors reacted by acting "domineering," belligerent," "intimidating," and "confrontational," and they "degraded" the carriers. Supervisors also encouraged carriers to skip breaks and harassed carriers who called in sick or did not respond to phone calls on their days off (Tr. 78-79, 85-86, 109-11, 139-40, 149, 164, 369). The Court agrees with Peralta's opinion regarding the attitude of the Post Office to its carriers. "[I]t surprised me how much pressure the employees were under to keep working. It stunned me that it was a common denominator in most of the cases. Keep pushing and pushing and pushing." (NH Tr. 71)

²⁴ The carriers in the five Postal Service cases did not appear to be aware that Form 3996 overtime requests were automatically approved if a supervisor failed to address the requests.

Dr. Bernard testified carriers are influenced by the corporate culture of the Postal Service to prioritize productivity. “[T]here seems to be a dance where I ask for extra time with a form 3996 . . . and [the forms will] sit on a desk, and so it becomes an effective denial. . . . [T]here's pressure that comes down . . . to the senior supervisor in an office down to the first-line supervisors to the employees about the need to meet these goals. And I mention it from the dance point of view is there was no evidence that people were punished on taking more time, but there was certainly this culture of discouraging, you know, that was there.” (NH Tr. 847-48) He stated carriers who in 2016 did report heat stress symptoms “were nonetheless encouraged to continue their routes.” (NH Tr. 945) Even though supervisors received heat stress training, “they still had the emphasis on productivity versus trying to make sure that there was an early identification of signs and symptoms and early first aid.” (NH Tr. 947)

In each of the five local cases, supervisors exhibited dismissive or disparaging attitudes towards the carriers. Here, as in two of the other local cases, it was a homeowner who happened to notice and respond to the carrier’s distress after his messages sent to the Benton Post Office went unanswered. To discourage requests for overtime or sick leave, supervisors intimidated, belittled, and, in at least once instance, bullied carriers, creating an atmosphere of disquiet and suspicion. These cases reveal a pervasive culture of mistrust and skepticism on the part of postal supervisors regarding reports of injuries or illnesses made by carriers. The supervisors’ indifference and the carriers’ reluctance to engage in confrontational conversations with management contribute to the stress already inherent in meeting the unforgiving demands of the 24-hour clock.

VII. THE CITATION

The Secretary’s Burden of Proof

To establish a violation of the general duty clause, the Secretary must prove: “(1) a condition or activity in the workplace presented a hazard; (2) the employer or its industry recognized the hazard; (3) the hazard was causing or likely to cause death or serious physical harm; and (4) a feasible and effective means existed to eliminate or materially reduce the hazard.” *S. J. Louis Constr. of Tex.*, 25 BNA OSHC 1892, 19 1894 (No. 12-1045, 2016).

Quick Transp. of Arkansas, LLC, No. 14-0844, 2019 WL 33717, at *2 (OSHRC March 27, 2019). “The Secretary also must prove that the employer ‘knew, or with the exercise of reasonable diligence could have known, of the violative conditions.’ *Tampa Shipyards Inc.*, 15 BNA OSHC

1533, 1535 (No. 86-360, 1992) (consolidated).” *A.H. Sturgill Roofing, Inc.*, No. 13-0224, 2019 WL 1099857, at *2 (OSHRC Feb. 28, 2019).

Alleged Repeat Violation of § 5(a)(1)

Item 1 of Citation No. 1 alleges,

OSH ACT of 1970 Section 5(a)(1): The employer did not furnish employment and a place of employment which were free from recognized hazards that were causing or likely to cause death or serious physical harm to employees in that employees were exposed to excessive heat while delivering the U.S. mail. Such exposure(s) may lead to serious and life-threatening heat-related illnesses such as heat stroke or heat exhaustion.

On or about June 10, 2016, at job sites located on mail routes for the Benton Post Office, in and around Benton, Arkansas, employees were exposed to the hazard of excessive heat while walking and delivering mail in an outdoor environment.²⁵

A. Existence of a Hazard

1. Exposure to Excessive Heat Did Not Cause LC-1’s Illness

The first element the Secretary must prove to establish a § 5(a)(1) violation is: “A condition or activity in the workplace presented a hazard.” The alleged violation description (AVD) of the Citation identifies the workplace at issue as the “outdoor environment” in Benton, Arkansas, through which the city carriers walked as they delivered mail on their routes. The Citation identifies the hazard presented as “excessive heat.” The AVD does not identify the “condition or activity” that presented the hazard. The implication is the condition presenting the hazard of excessive heat is hot weather, but the AVD does not specify at what temperature weather is “hot,” and it does not include the high temperature or heat index for June 10, 2016.

Heat Stress Hazards

The Secretary called Dr. Aaron Tustin to testify regarding excessive heat exposure. He explained heat stress results from a combination of a person’s metabolic heat and environmental heat. Metabolic heat is generated by the human body and environmental heat results from sources

²⁵ At the beginning of the hearing, counsel for the Postal Service requested a standing objection “to any reference of the hazard in this case as being anything other than excessive heat, which is the terminology used in the citation.” (Tr. 17) The Secretary was not opposed, and the Court granted the Postal Service’s request for a standing objection to “any reference to the hazard as being anything other than excessive heat.” (Tr. 18) At the national hearing, the Court ruled that in the context of the five Postal Service cases, references to “excessive heat,” “heat stress,” or similar formulations are “all the same issue regarding the § 5(a)(1) citations that have been alleged.” (NH Tr. 1339) The Commission has also recognized these phrases are interchangeable in the context of § 5(a)(1) cases alleging exposure to the hazard of excessively high temperatures. *See Duriron Co., Inc.*, No. 77-2847, 1983 WL 23869 (OSHRC April 27, 1983) (“heat stress,” “excessive heat,” “extreme heat”); *Industrial Glass*, No. 88-348, 1989 WL 88787 (OSHRC April 21, 1992) (“heat stress,” “excessive exposure to heat”).

outside the body. Sources of environmental heat include air temperature, relative humidity, radiant heat, and air movement. Humidity is the concentration of water vapor in the air. Radiant heat is generated by electromagnetic waves, such as direct sunlight (NH Tr. 255-57). Sunlight is “radiation that is striking the worker. So moving from the shade into the sunlight, even if the air temperature doesn’t change, you’ll be struck by the radiant heat so it can feel hotter.” (NH Tr. 258)

The NWS uses the heat index to combine air temperature and relative humidity as a single metric. “What it’s doing is accounting for two of the main environmental factors. . . . If the humidity rises, the heat index rises for a given temperature. So it’s assessing how it feels to a worker.” (NH Tr. 274)

The most serious illness caused by heat stress is heatstroke, which causes a dysfunction of the brain. Symptoms include slurred speech, disorientation, confusion, unconsciousness, or coma. Heatstroke causes an elevated body temperature, generally defined as 104 or 105°F (NH Tr. 259). Heat exhaustion is a less severe result of heat stress. Its symptoms may include headache, nausea, vomiting, dizziness, and profuse sweating. Heat exhaustion does not result in an elevated body temperature or brain dysfunction (NH Tr. 260). Dr. Tustin stated the symptoms of heat exhaustion, either separately or in combination, are also symptoms of other conditions and their presence may be unrelated to heat (NH Tr. 538-541). Unlike heat stroke, there is no diagnostic test for heat exhaustion (NH Tr. 536). Less severe conditions caused by heat stress include heat cramps, heat rash, and heat syncope (fainting) (NH Tr. 261).

LC-1’s Diagnosis

The collapse, hospitalization, and diagnosis of heat exhaustion of LC-1 were the events that triggered OSHA’s inspection and subsequent issuance of the Citation in this proceeding. LC-1’s doctors later determined his diagnosis of heat exhaustion was incorrect. The symptoms LC-1 manifested on June 10, 2016, were a result of vertigo; his illness was labyrinthitis. Dr. Tustin conceded he could not state within a reasonable degree of medical certainty that LC-1’s illness was caused by exposure to excessive heat (NH Tr. 409, 682-761). Dr. Shirley Conibear concurred with this opinion (NH Tr. 3014).²⁶

²⁶ Dr. Conibear is the president of Carnow Conibear & Associates. She received a medical degree in 1976 and a Master of Public Health degree. She is board-certified by the American Board of Preventive Medicine and Occupational Medicine (NH Tr. 2967-68). She is president and part owner of Carnow Conibear & Associates. She owns its sister company OMS, where she works as a senior physician, performing physical exams and fitness-for-duty evaluations in regulated entities (NH Tr. 2972-73). She also supervises “athletic trainers who are embedded in industry, using what’s called the industrial athlete model.” (NH Tr. 2974) Dr. Conibear is an adjunct professor at the University of

The fact the incident cited in the AVD turns out not to have been caused by the cited hazard does not disprove the alleged violation.

Proof that a cited activity actually caused harm or necessarily could have caused harm under the precise physical conditions that happened to be present at the time of the violation, or at any other specific time, is not required. *See Bomac Drilling*, 9 BNA OSHC 1682, 1691-92 (No. 76-450, 1981) (consolidated) (“Under section 5(a)(1) case law, the ‘hazard’ that must be ‘recognized’ is not a particular set of circumstances at a specific location and specific point in time but rather the broader, more generic or general hazard.”), *overruled on other grounds by United States Steel Corp.*, 10 BNA OSHC 1752 (No. 77-1796, 1982); *Brennan v. OSHRC*, 494 F.2d 460, 463 (8th Cir. 1974) (Secretary need not prove general hazard was cause of the accident that gave rise to the citation); *Beverly Enters.*, 19 BNA OSHC at 1171 (same).

Quick Transp. of Arkansas, 2019 WL 33717, at *3.

2. Judge Ball’s 2014 Decision in *United States Postal Service*

Even though the Secretary is not required to establish excessive heat caused the illness of LC-1 on June 10, 2016, it is still his burden to prove the temperature or heat index that day exposed Benton city carriers to the hazard of excessive heat. In support of his position, the Secretary cites Judge Ball’s 2014 decision finding a willful violation of § 5(a)(1) in *United States Postal Service*, 2014 WL 5528391. The Secretary states, “On facts similar to those presented here, Judge Ball found that there was ‘no real dispute’ that letter carriers in Independence, Missouri, were exposed to the hazard of excessive heat.” (Secretary’s brief, p. 21, n. 20)²⁷ In this case, however, the Postal Service vigorously disputes the temperature or heat index on June 10, 2016, presented a hazard to Benton’s carriers, and consequently the record evidence differs markedly from that of the Independence case.

As an unreviewed ALJ decision, the Independence *United States Postal Service* case is not Commission precedent. “[R]eliance on an unreviewed administrative law judge decision involving

Illinois and is on the Resident Advisory Committee there (NH Tr. 2982). For almost a decade, she was the director of programs and medicine in the educational resource center, “which NIOSH established to train nurses, safety professionals, industrial hygienists, and physicians in occupational health and safety.” (NH Tr. 2984) She is a member of the National Advisory Committee for Occupational Safety and Health (NACOSH) (NH Tr. 2985).

The Court determined Dr. Conibear was qualified, based on her knowledge, skill, experience, training, and education, to testify as an expert “in occupational medicine, with specialized expertise in heat stress and abatement measures that may materially reduce the hazard of excessive heat.” (NH Tr. 3013)

²⁷ The decision states, “For the most part, it appears Respondent does not contest the existence of a violation of the general duty clause—almost all of Respondent’s brief is directed towards the willful characterization. . . . There is no real dispute that [Independence carriers] were exposed to extreme heat on July 23 and 24, and that such heat was a hazard.” *United States Postal Service*, 2014 WL 5528391, at *14.

a citation under § 5(a)(1) of the Occupational Safety and Health Act, 29 U.S.C. § 654(a)(1) [is] misplaced. *See Leone Constr. Co.*, 3 BNA OSHC 1979, 1981 (No. 4090, 1976) (unreviewed administrative law judge decision does not constitute binding precedent for the Commission).” *TNT Crane & Rigging, Inc.*, No. 16-1587, 2020 WL 1657789, at *7 (OSHRC March 27, 2020). A case decided by the Commission last year involving a citation under § 5(a)(1) for exposure to excessive heat is, however, binding precedent for this Court.

3. The Commission’s Decision in *A.H. Sturgill Roofing, Inc*

On February 28, 2019, the Commission issued a decision in a case involving an employee who collapsed at a worksite and subsequently died from complications of heat stroke after working on a roofing project. *A.H. Sturgill Roofing, Inc.*, No. 13-0224, 2019 WL 1099857 (OSHRC Feb. 28, 2019). Commissioner (now Chairman) Sullivan, with then-Chairman MacDougall concurring, vacated two items alleging serious violations that had been affirmed by the judge in the underlying case. Commissioner Atwood dissented. Of interest here is Item 1 of the citation, alleging a serious violation of § 5(a)(1) for exposing employees “to the hazard of excessive heat from working on a commercial roof in the direct sun.” *Id.* at 2019 WL 1099857, at *1.

The roofing project Sturgill was working on involved tearing off the old roof of a flat-topped bank building in Ohio so a new roof could be installed. The crew included three temporary employees.

One of the temporary employees was “MR,” a 60-year-old man with various preexisting medical conditions, including hepatitis C and congestive heart failure. It was the first day that MR was assigned to work at Sturgill. He began work that day at 6:30 a.m. and was tasked with standing near the edge of the roof where other employees brought him a cart full of cut-up pieces of roofing material that he then pushed off the roof into a dumpster below. The assignment of this work was intentionally made by Foreman Leonard Brown because it was MR's first day on the project. When MR began his work, the temperature was approximately 72°F with 84 percent relative humidity. There is no dispute that Brown encouraged all employees to utilize the immediate access to ice, water, rest, and shade, without fear of reprisal.

At around 11:40 a.m., after other employees reported being concerned about MR to Brown and Brown himself observed him “walking like clumsy,” MR collapsed and began shaking. The temperature at that point was approximately 82°F with 51 percent relative humidity. Emergency medical personnel were summoned, and they took MR to the hospital where his core body temperature was determined to be 105.4°F. MR was diagnosed with heat stroke and died three weeks later. According to the coroner, his death was caused by “complications” from heat stroke.

Id. at 2019 WL 1099857, at *1-2. The Commission found the Secretary failed to establish “the existence of a hazard likely to cause death or serious physical harm.” *Id.* at 2019 WL 1099857, at *3.

4. Is “Excessive Heat” a Cognizable Hazard Under § 5(a)(1)?

The Postal Service argues that in *A.H. Sturgill*, the Commission found “excessive heat” is not a cognizable hazard under the general duty clause. In her concurring opinion, Chairman MacDougall questioned the meaning of the cited hazard:

In this case, what is meant by “excessive heat?” Is it the heat index the judge formulated by adding 15 degrees to the ambient temperature, or the heat index that would result from adding 10 degrees to the ambient temperature since the foreman said it felt about that much hotter on the roof, or some combination of factors perhaps set forth in OSHA’s website publication regarding “Occupational Heat Exposure”? To pose the question is to answer it. By defining the hazard merely as “excessive heat,” the Secretary has failed to point to any specific, concrete environmental conditions, and has instead effectively defined the hazard as a sliding scale of possibilities. This open-ended, moving target is not a cognizable hazard under the general duty clause as it provides insufficient notice to the employer of exactly what it is required to free its workplace from to protect its employees.

Id. at 2019 WL 1099857, at *15.

In a footnote to the lead opinion, Commissioner Sullivan (now Chairman) agreed “with the concerns expressed by Chairman MacDougall in her concurring opinion in connection with defining the hazard in this case as ‘excessive heat.’” *Id.* at 2019 WL 1099857, at *7, n. 14.

Contrary to the Postal Service’s argument, this agreement does not establish that a majority of the Commission conclusively found “excessive heat” is not a cognizable hazard under the general duty clause. This reference to defining the hazard is the only one in a lengthy footnote on foreseeability, and its vague reference to “the concerns expressed by Chairman MacDougall” is insufficient to constitute a dispositive conclusion that a citation under § 5(a)(1) alleging exposure to “excessive heat” will always fail due to lack of fair notice to the employer.²⁸ If Commissioner

²⁸ In its entirety, footnote 14 in *A.H. Sturgill* states:

While the Commission has never held that certainty as to the threshold level for injury is a prerequisite to a general duty clause violation, *see Beverly Enters., Inc.*, 19 BNA OSHC at 1172, knowledge of the “significant risk of harm” cannot be based on the hidden characteristics of an “eggshell” employee; the risks resulting from such characteristics do not fit within the confines of a realistic possibility or the consideration of the best available evidence. *See Pratt & Whitney*, 649 F.2d at 104 (the Act “is intended only to guard against significant risks, not ephemeral possibilities”).

Sullivan’s agreement with Chairman MacDougall’s “concerns” constituted a majority opinion that “excessive heat” is not a cognizable hazard, there would be no need for a concurring opinion or for most of the analysis in the lead opinion. The Court determines the Commission has not held absolutely that “excessive heat” is not a cognizable hazard under the general duty clause. The cited hazard is, however, difficult to establish under *A.H. Sturgill*.

5. Significant Risk of Harm

To establish a cited condition or activity presents a hazard in the workplace, the Secretary must prove the condition or activity

exposed employees to a “significant risk” of harm. *See Beverly Enters., Inc.*, 19 BNA OSHC 1161, 1170-1172 (No. 91-3144, 2000) (consolidated); *see also Pratt & Whitney Aircraft v. Donovan*, 715 F.2d 57, 63 (2d Cir. 1983) (holding that a “significant risk” of harm can be established by showing a “meaningful possibility” of injury); *Titanium Metals Corp. v. Usery*, 579 F.2d 536, 541 (9th Cir. 1978) (the possibility of harm resulting must be “upon other than a freakish or utterly implausible concurrence of circumstances”); *Nat’l Realty & Constr. Co. v. OSHRC*, 489 F.2d 1257, 1265 n.33 (D.C. Cir. 1973).

Quick Transp. of Arkansas, 2019 WL 33717, at *3.

Commissioner Sullivan agrees with the concerns expressed by Chairman MacDougall in her concurring opinion in connection with defining the hazard in this case as “excessive heat.” He also finds, however, that the Secretary must prove that Sturgill could have reasonably foreseen the incident occurring given all of the facts available to it prior to the incident and not simply that there was a “risk of harm” based on an expert’s later opinion as to what constitutes a “heat-related exposure risk.”

In Commissioner Sullivan’s view, the Commission should return to an interpretation put forth in *Pratt & Whitney*, 8 BNA OSHC 1329 (No. 13591, 1980), *aff’d in part, rev’d in part, remanded*, 649 F.2d 96, 101 (2d. Cir. 1981), and *Bomac Drilling*, 9 BNA OSHC 1681 (No. 76-0450, 1981) (consolidated), overruled by *U.S. Steel Corp.*, 10 BNA OSHC 1752 (No. 77-1796, 1982). In those cases, the Commission held that the Secretary must prove that an incident is “reasonably foreseeable” when citing under the general duty clause. *Pratt & Whitney*, 8 BNA OSHC at 1334. The reasoning underlying this test was a concern that general duty clause cases were wrongly focusing on the particular incident causing the injury in the case, rather than the hazard in general. Commissioner Sullivan views the focus of the current case to be the same as it was in *Pratt & Whitney*—what happened specifically to the employee (MR), rather than whether the employer (Sturgill) could have reasonably foreseen the incident occurring given all the other conditions at the time of the incident. As such, in his view, the Commission should again embrace the “reasonably foreseeable” test as set forth by the Commission in those cases, an interpretation which the Commission pointed out is consistent with the definition of a “serious” violation under section 17(k) of the Act. *See Pratt & Whitney*, 8 BNA OSHC at 1335; 29 U.S.C. § 666(k). When evaluating the general duty clause, the Secretary must establish that a truly “meaningful” and “significant” possibility of harm existed, and that “employers receive adequate notice of their legal responsibilities under the general duty clause.” *See 5 BERKELEY J. EMP. & LAB. L.* at 305. Since the Secretary failed to make this showing here, Commissioner Sullivan finds that the Secretary failed to establish the existence of a hazard.

Id. at 2019 WL 1099857, at *7, n. 14.

It is the Agency's responsibility to determine, in the first instance, what it considers to be a "significant" risk. Some risks are plainly acceptable and others are plainly unacceptable. If, for example, the odds are one in a billion that a person will die from cancer by taking a drink of chlorinated water, the risk clearly could not be considered significant. On the other hand, if the odds are one in a thousand that regular inhalation of gasoline vapors that are 2% benzene will be fatal, a reasonable person might well consider the risk significant and take appropriate steps to decrease or eliminate it. Although the Agency has no duty to calculate the exact probability of harm, it does have an obligation to find that a significant risk is present before it can characterize a place of employment as "unsafe."

Indus. Union Dep't, AFL-CIO v. Am. Petroleum Inst., 448 U.S. 607, 655 (1980) (*Benzene*).

The Secretary argues he has established excessive heat exposure presents a significant risk of harm to carriers generally. He points to the testimony of Dr. Tustin and Dr. Bernard regarding the statistical correlation between the number of heat-related fatalities and illnesses and higher temperatures.

Screening Levels

The Bureau of Labor Statistics (BLS) tracks the number of annual occupational heat-related deaths and nonfatal heat-related illnesses in the Census of Fatal Occupational Injuries (CFOI). From 2011 to 2016, the CFOI reported an annual average of 36 heat-related fatalities and 3,500 nonfatal heat-related illnesses (NH Tr. 267-68). Dr. Tustin reviewed employer reports to OSHA of heat-related hospitalizations over a three-year period. The employers reporting the most hospitalizations were the United Parcel Service (UPS) (63 hospitalizations) and the Postal Service (49 hospitalizations). Nationwide, UPS and the Postal Service accounted for 14 percent of all reported occupational heat-related hospitalizations over a 3-year period (NH Tr. 270).

The American Conference of Governmental Industrial Hygienists (ACGIH) publishes threshold limit values (TLVs) for hazards to which a worker can be exposed on a daily basis without adverse effects. Dr. Tustin testified the ACGIH and the National Institute for Occupational Safety and Health (NIOSH) implement "screening levels." "If the environmental heat is above the screening level, then there's a hazard and the employer should take additional steps to try to reduce the hazard to protect workers." (NH Tr. 280)²⁹

²⁹ The Commission has been reluctant to hold that exceeding levels published by a third-party organization constitute a hazard:

We must note that we would be hesitant to hold that exceeding those levels is, in and of itself, proof of exposure to a hazard. The Secretary asserts that they are the dominant guidelines on heat stress and are followed by all professional industrial hygienists. . . . While it would be very appropriate for the Secretary to include a safety margin in an OSHA standard, the presence of a safety margin

Based on his research, Dr. Tustin concluded, “[A] screening threshold of about 80°F seemed appropriate for using the heat index to screen for hazardous conditions.” (NH Tr. 285)³⁰ He conceded some workers may experience heat-related illnesses even if the TLV for outdoor temperature is not exceeded, perhaps due to predisposing conditions. “Predisposing conditions are medical conditions or medications that could increase the risk of heat-related illness.” (NH Tr. 577-78)

A *dose-response relationship* is the relationship between the amount of exposure (dose) to a substance or condition and the resulting changes (response) in body function. He believes there is dose-response relationship between heat index values above 80°F and heat stress—the higher the heat index, the greater the heat stress hazard. He conducted a meta-analysis of 570 heat-related deaths dating back to 1947 (NH Tr. 287). He calculated the heat index for each case. A heat index of less than 80°F does not appear to present a heat stress hazard. A higher heat index increases the risk of heat stress (NH Tr. 291-92).

[W]hen the heat index was between 80 and 90 [degrees Fahrenheit], there definitely seemed to be more risk. I think about 10 to 20 percent of all the fatalities happened when the heat index was between 80 and 90. Then when the heat index was over 90, there seemed to be higher risk in the sense that I think about 80 percent of the fatalities occurred when the heat index was over 90. So we concluded that a heat index of about 80 °F seemed to be a reasonable screening threshold for figuring out whether there was a heat stress hazard present.

(NH Tr. 292) He concluded, “[T]here's a hazard when the heat index is over 80 for the type of work that city carriers are doing.” (NH Tr. 581)

Number of Heat-Related Incidents Among Carriers

The Secretary contends the significant risk of harm from excessive heat to which carriers are exposed is made manifest if the Court expands the scope of reported heat-related illnesses beyond the date and location of the Citation’s AVD in this case.

in the documents [he] relied on to prove a hazard here gives us reservations as to whether evidence that the limits in the NIOSH document were exceeded would, in fact, prove that there was a hazard. . . . We therefore have considerable reservations about basing a violation of section 5(a)(1) on those guidelines. Because we are deciding this case based on the insufficiency of the Secretary's evidence, however, we need not decide whether a violation of section 5(a)(1) would have been established *if* the Secretary had proved that the limits in the documents had been exceeded.

Industrial Glass, No. 88-348, 1992 WL 88787, at *14, n. 11 (OSHRC Apr. 21, 1992).

³⁰ Denoting temperatures of 80°F or higher as hazardous is Dr. Tustin’s benchmark. The Secretary has declined to “explicitly enumerate . . . a range of temperatures at which heat becomes hazardous.” (Secretary’s brief, p. 29)

The hazard of heat stress extends far beyond the Benton Station and even the Arkansas District. In the summers of 2015–2018, 33 carriers reported heat related incidents at 25 different Arkansas District Stations; all but two incidents occurred in the month of June, July or August. . . Thirteen of the 33 Arkansas District carriers lost a combined 166 days away from work. . . . On two specific dates in 2015, numerous letter carriers reported heat incidents ([NH Exh.] C-127).

(Secretary’s brief, p. 11)

If consideration of heat-related illnesses is expanded nationwide, the Secretary believes the significant risk to carriers of excessive heat exposure is evident.

According to USPS’s records. . . , the number of heat-related incidents per year since 2015 classified by USPS on its official accident reports (PS Form 1769/301) as caused by “GEN-EXPOSURE EXTREME TEMP-HOT” are as follows for 2015, 2016, 2017, and 2018: 378, 564, 399 and 631 ([NH Tr. 1670-71]) In total, the number of heat-related incidents over the four years was 1,972. ([NH Tr. 1668-69]) When broken down, the 1,972 heat-related incidents came from 1,258 different USPS facilities across the country and resulted in carriers missing a total of 8,757 days away from work. [NH Exh.] C-127)

(Secretary’s brief, p. 13)

The Postal Service counters that the number of carriers reporting heat-related illnesses is miniscule when compared to the number who did not report heat-related illnesses. Rodman Harvey stated, “On June 10, 2016, there were approximately 793 city carriers working in the postal district that includes Benton, Arkansas, and there was only one alleged heat-related illness reported.” (NH Tr. 2886)

The Postal Service retained Dr. Joshua Gotkin to analyze its data on heat-related accidents.³¹ The Court qualified Dr. Gotkin as an expert “in the field of economics, with specific expertise in the field of statistical analysis and the application of statistics in sampling.” (NH Tr. 1631-32) Dr. Gotkin reviewed data on the number of heat-related incidents involving carriers that had occurred from fiscal year 2015 to fiscal year 2019 (NH Tr. 1632-33). For that 4-year period, he found 1,023 reported heat-related injuries to carriers and compared those to the total number of carrier workdays. “[Y]ou really just divide the number of events into the total number of carrier days, and that gives you a 1 in 308,000 workdays in terms of the odds of having a heat-related

³¹ Dr. Joshua Gotkin is the director of ERS Group, a consulting firm specializing in labor and employment economics (NH Tr. 1623). Dr. Gotkin received an undergraduate degree in economics and mathematics and a graduate degree in economics in applied econometrics, economic history, and labor economics. He received a PhD in economics from the University of Arizona in 1995 (NH Tr. 1619-20). ERS Group hired Dr. Gotkin in 1996. He became its director in 2011 (NH Tr. 1622-23). He uses applied econometrics to develop models for analyzing statistics (NH Tr. 1622-26).

stress incident. . . . I also restricted it to the warmer summer months, and the odds are then reduced to 1 in 142,000 workdays.” (NH Tr. 1651) Dr. Gotkin stated, “[T]hese odds are so small that the probability associated with those are nearly zero.” (NH Tr. 1652-53)

Linda DeCarlo is the manager of safety and OSHA compliance programs for the Postal Service. She is its highest ranking safety officer (Tr. 1245). DeCarlo tracks trends of hazards as part of her duties. DeCarlo estimated that, since 2015, approximately 500 to 600 Postal Service employees (including carriers) annually have reported heat-related occupational injuries (NH Tr. 1257-59). The number of heat-related injuries does not cause her concern. “We have close to 120,000 accidents, incidents, near misses and customer events that take place in any given year. Thirty thousand of those are related to motor vehicle. Maybe 20,000 slip, trips, and falls. Seven thousand dog bites. So 500 heat-related claims, only which of half are recordable, is not a major concern when there are other opportunities that we have in front of us.” (NH Tr. 1261)

The Secretary argues the small percentage of carriers affected with heat-related illnesses does not disprove excessive heat hazards existed on the days they were affected. In *Pepperidge Farm, Inc.*, the employer argued different employees were affected differently by the ergonomic activity cited as a hazard. The Commission held susceptibility to illness or injury alone is not a basis for finding no hazard exists.

Pepperidge further points out, however, and the Secretary's experts agree, non-workplace factors may cause or contribute to the illnesses at issue, and that individuals differ in their susceptibility to potential causal factors. However, such characteristics (and the inability to determine threshold of harm) are not unique to putative ergonomic hazards but inhere in other workplace hazards as well. For example, some or all of these characteristics obtain for many chemical, toxic and other workplace hazards. Thus, to preclude the application of section 5(a)(1) to a hazard with the characteristics cited by Pepperidge would be to preclude the use of Section 5(a)(1) for many occupational ills. To be clear, characteristics such as those identified by Pepperidge may (as discussed later) bear on questions of causation or feasibility of abatement. They do not, however, *ipso facto* preclude the possibility of regulation under Section 5(a)(1).

Pepperidge Farm, Inc., No. 89-265, 1997 WL 212599, at *23 (OSHRC Apr. 26, 1997). The Secretary also contends he is not required to state the temperature or heat index at which heat becomes excessive. “While knowledge of the threshold for injury may be essential in some cases, however, the Commission has never held that certainty as to the threshold level for injury is a prerequisite to regulation under the general duty clause.” *Id.* at 1997 WL 212599, at *22.

It is not the Secretary's burden to prove it is likely a heat-related illness will occur at certain temperatures, only that if such an illness occurs the carrier would be exposed to a significant risk of harm. "[T]here is no requirement that there be a 'significant risk' of the hazard coming to fruition, only that if the hazardous event occurs, it would create a 'significant risk' to employees. *See Kelly Springfield Tire Co. v. Donovan*, 729 F.2d 317, 322–25 (5th Cir.1984)." *Waldon Health Care Ctr.*, No. 89-2804, 1993 WL 119662, at *11 (OSHRC April 2, 1993). The Secretary must prove, therefore, that if "excessive heat" occurs, it would create a significant risk to carriers delivering mail that day. "[I]n order to prove the existence of a hazard within the meaning of the general duty clause, the Secretary cannot merely show that there may be some degree of risk to employees. He must show, at a minimum, that employees are exposed to a significant risk of harm." *Kastalon, Inc.*, Nos. 79-5543 & 79-3561, 1986 WL 5351412, at * 5 (OSHRC July 23, 1986).

Magnitude of the Risk

Dr. Tustin was unable to quantify the degree of risk to which outdoor workers would be exposed in 100°F weather. Counsel for the Postal Service cross-examined Dr. Tustin regarding a scenario in which 1000 carriers are working on a day when the temperature is 100°F:

Q.: Can you tell me in that scenario how many employees -- what percentage of employees working in that 100-degree day would experience a heat-related illness?

Dr. Tustin: No.

Q.: You can't tell me how likely it is?

Dr. Tustin: I can't give you an exact number as far as a number of employees who will have an illness, no.

Q.: When you say you can't give me an exact number; can you give me any number?

Dr. Tustin: I can tell you, like I said before, that there's a dose-response relationship, and it's --from the data that I've seen, it's more likely that employees will become sick on a 100-degree day compared to an 80-degree day. But I can't give you an exact number.

Q.: Can you tell me, on a 100-degree day with 1,000 employees working outside under identical conditions, what percentage will sustain a heat-related illness that is "serious" by your definition?

Dr. Tustin: No.

Q.: Do you recall during your deposition giving testimony about the likelihood that a cohort of workers would experience heat-related illness? . . . [Reading from deposition]: QUESTION: "The employees that would develop an illness, what sort of characteristics would you expect to see in those employees, if any?" ANSWER:

"Like I said, I can't predict. If you gave me a cohort of workers at the beginning of the day, and so predict which workers are going to develop a heat-related illness, I don't think I can do that -- I could do that." Do you recall giving that testimony?

Dr. Tustin: Yes.

Q.: Do you agree with it?

Dr. Tustin: Yes.

(NH Tr. 546-47)

Dr. Tustin's testimony establishes incidents of heat-related illness are likely to increase as the heat index rises above 80°F, but it does not establish the magnitude of the risk or its significance. Dr. Tustin stated the severity of heat-related illnesses varies. Some, such as heat stroke, can be deadly, but others (such as heat rash and dehydration) can be minor (NH Tr. 261).

Dr. Tustin reviewed spreadsheets compiled by the Postal Service when he was preparing his expert report. They listed heat-related incidents reported by Eastern Area Postal Service employees in the summers of 2017 and 2018 (NH Exh. C-162 & C-163).

Q. So you testified earlier that there are incidents in the data that clearly weren't reportable; is that correct, just from your review?

...

Dr. Tustin: I mean, just looking at the spreadsheet there are some that say the person felt dizzy and remained working, so yes. I mean, that doesn't seem to be a reportable incident.

Q.: And is it your understanding that these reports could include situations like an employee calling their supervisor and saying, "I feel really hot, I'm going to sit down for a while," and drinking a bottle of water and then continuing working?

Dr. Tustin: Yes, it appears that there are some like that.

Q.: I mean, there's one in there that just says, "I feel hot," right?

Dr. Tustin: I don't know. There might be.

...

Q.: Well, if that employee sits down and drinks a lot of water and says, "Hey, I feel great, I'm going to go back to work," do they have a heat illness?

Dr. Tustin: They may have -- they might have had symptoms that would cause them to stop working, so that could be a mild heat illness, yes.

Q.: Would you characterize that as serious?

Dr. Tustin: No

(NH Tr. 628-29)

Determination of causation is also an issue. In recording injuries from vehicular accidents, falls, or dog bites, there is little doubt of the actual cause of the injury. Not all conditions diagnosed

as heat-related are, however, heat-related. Dr. Tustin conceded the symptoms of heat exhaustion, either separately or in combination, are also symptoms of other conditions and their presence may be unrelated to heat. There is no diagnostic test for heat exhaustion (NH Tr. 538-541).

Dr. Conibear testified regarding the inconclusive nature of presumed heat-related illnesses. Here, LC-1 was initially diagnosed with heat exhaustion but his doctors later determined the correct diagnosis was labyrinthitis. LC-1 was also diagnosed with hypokalemia, or low potassium level in the blood. "Potassium is a salt that's present in your cells in the blood. It's one of the entities that's referred to as an electrolyte. When you vomit, you lose a lot of potassium. . . [D]iuretic medications cause hypokalemia. Diarrhea causes hypokalemia, and sweating can do it also." (NH Tr. 3017) LC-1 was also diagnosed with dehydration, which Dr. Conibear attributed to his vomiting and sweating (NH Tr. 3017-18).

Dr. Conibear stated a later diagnosis in a reported heat-related case is often more accurate than the initial diagnosis.

Q.: Why are later records often more helpful?

Dr. Conibear: Well, because, as this case illustrates, heat exhaustion has a course that it runs and you expect the person to improve pretty quickly and not have any symptoms in a matter of hours. In this case that didn't happen. And he was also -- he had physical signs that were not characteristic of heat exhaustion in that he was staggering and couldn't walk. So those all indicated that this was not the right -- heat exhaustion was not the right diagnosis.

Q.: And Dr. Tustin testified that within a reasonable degree of medical certainty, [LC-1] did not suffer from a heat-related illness. Do you agree with Dr. Tustin's—

Dr. Conibear: Yes.

...

Q.: Based on your review of the records, was [LC-1] acclimatized?

Dr. Conibear: Yes.

Q.: Why do you say that?

Dr. Conibear: Because he had been working and was doing the same work that he had been doing for weeks, and basically, he had satisfied the 2 weeks of acclimatization.

(NH Tr. 3020-21)

Tolerability of Heat Stress

At one point in the hearing, Dr. Bernard compared ACGIH's TLV levels for heat to OSHA's occupational noise exposure standard. Section 1910.95 sets the permissible exposure limit (PEL) for noise exposure during an 8-hour day to 90 dBA for all workers.

The PEL for noise is 90 dBA. And you might argue a little bit about what the number is, but [there] generally are between 20 and 25 percent of the population will suffer an occupational hearing loss at 90 dBA. So that's the reason for the hearing conservation amendment where you have audiograms. That's your way of catching somebody who will be less tolerant of the noise. Even with the ACGIH TLV at 85 dBA, there's a small percentage of people who will still have an occupational hearing loss. So again, the audiograms are a way of catching that.

(NH TR. 994-95)

Counsel for the Postal Service returned to the subject on cross-examination.

Q.: If we think about people being exposed to noise levels of 90 dBA or higher, you or somebody like you could tell us at those ranges this percentage of workers would lose hearing; is that fair?

Dr. Bernard: Yes.

Q.: With these TLVs would you agree that even at levels below the TLV there will be certain workers who will have heat-related illness?

Dr. Bernard: Yes.

Q.: And you would agree with me that at levels above the TLV, perhaps significantly above the TLV, there will be workers that will not have heat-related illness?

Dr. Bernard: Yes.

...

Q.: [W]e know that above 90 dBA there's a certain percentage who are pretty likely to lose hearing; do we not? That's why OSHA set the limit at 90?

Dr. Bernard: Yes.

...

Q.: Would you agree with me that the TLVs are designed -- currently designed such that 99 percent of workers exposed at levels below the TLVs will keep their core body temperatures at 38.3°C or below?

Dr. Bernard: Yes.

Q.: The final question on ACGIH, the ACGIH guidelines are set not to prevent heat illness. They're set to -- the goal of them, if you will, is to keep the core body temperature at 38.3°C or below?

Dr. Bernard: Well, and more importantly -- or more specifically so that you can maintain thermal equilibrium.

Q.: So again, those are unlike, for example, the noise standard which is set to prevent hearing loss? This is set to maintain thermal equilibrium.

Dr. Bernard: Yes.

Q.: So it's not set to prevent an illness?

Dr. Bernard: Not directly.

Q.: Well, I mean, you already agreed that certainly you will have some unspecified percentage of workers who will experience a heat illness even when working at levels below the TLV?

Dr. Bernard: Yes.

(NH Tr. 1056-59)

As with heat exposure, noise exposure affects different people differently. A certain percentage of workers will suffer some hearing loss at a level below the PEL, and a certain percentage may not register hearing loss at certain levels above the PEL. The difference is employers know the precise level OSHA, for the purpose of compliance, has determined noise presents a hazard. Section 1910.95 establishes a regulatory baseline that provides notice to employers of the PEL for noise exposure and the requirements for hearing monitoring and testing.

Quantification of “Excessive” Heat

The Secretary must show a condition or activity in the workplace presents a hazard. Here, the condition and the alleged hazard are identical. The condition of excessive heat presents an alleged hazard of excessive heat. The precise temperature at which regular heat becomes excessive is, however, unclear. OSHA has been urged to promulgate a heat stress standard since shortly after the Act went into effect. *See Industrial Glass*, No. 88-348, 1992 WL 88787, at *12 (OSHRC Apr. 21, 1992) (“In 1972, NIOSH recommended that OSHA adopt a standard governing exposure to heat, and a panel appointed by OSHA endorsed that recommendation in 1974. Nevertheless, OSHA has not adopted a heat stress regulation[.]”).

The local and national hearings in the Postal Service cases establish people tolerate environmental heat at different levels, and other factors, such as underlying medical conditions or medication use, can affect their usual tolerability. Dr. Tustin and Dr. Bernard agree that some people may sustain a heat-related illness at temperatures below 80°F, their recommended screening level. The statistical evidence from the national hearing establishes the vast majority of carriers completed their routes without incident on the dates the alleged heat-related illnesses cited by the Secretary occurred. Without a temperature- or heat index-specific standard, it is difficult for employers to know when heat is “excessive.” Chairman Sullivan commented on the lack of a uniform measurement in *A.H. Sturgill*. “The Secretary’s failure to establish the existence of an excessive heat hazard here illustrates the difficulty in addressing this issue in the absence of an OSHA standard.” *Id.* at 2019 WL 1099857, at *5, n.8.

In her concurring opinion in *A.H. Sturgill*, former Chairman MacDougall addresses the nebulous phrase “excessive heat.”

“Excessive heat” is a condition that is inherent in the performance of outdoor work and one that only presents the possibility for harm, not an employment condition that by itself necessarily carries a significant risk of harm. *See Mo. Basin Well Serv., Inc.*, 26 BNA OSHC at 2316 n. 5 (MacDougall, Chairman) (“As the Commission observed in *Pelron*, an employer cannot reasonably be expected to free its workplace of inherent risks that are incident to its normal operation.”). This vague definition also neither identifies a condition or practice over which an employer can reasonably be expected to exercise control nor provides an employer with fair notice of what it is required to do to protect its employees.

Id. at 2019 WL 1099857, at *15.

“Whether there exists a significant risk depends on both the severity of the potential harm and the likelihood of its occurrence, but there is an inverse relationship between these two elements. As the severity of the potential harm increases in a particular situation, its apparent likelihood of occurrence need not be as great.” *Weirton Steel Corp*, No. 98-0701, 1999 WL 34813785, at *5 (OSHRC July 31, 2003). The record demonstrates the difficulty of accurately determining the etiology of illnesses presumed to be heat-related. The Secretary has not shown the incidence of carriers’ self-reported heat-related illnesses establishes a “significant” risk of harm, either in the statistical likelihood of occurrence or in the severity of potential harm.

Conclusion

The Court concludes the Secretary did not establish the cited weather conditions exposed Benton’s city carriers to a significant risk of harm from excessive heat on June 10, 2016.³² The Secretary has not met his burden to establish a condition or activity in the workplace presented a hazard. The Citation is vacated.

B. Feasible and Effective Means to Eliminate or Materially Reduce the Hazard

Assuming the Secretary had established the temperature or heat index on June 10, 2016, presented an excessive heat hazard, as well as the elements of industry or employer recognition,

³² This conclusion is not intended to minimize the general physical discomfort of carriers delivering mail in hot weather (Tr. 137-38, 522-23). As the Commission noted in *International Glass*, heat is an unavoidable feature of some workplaces (such as the open air in summer). “While the employee testimony regarding the difficulties they experienced because of the hot working conditions troubles us because it clearly shows that this is an uncomfortable working environment and that employees do suffer from the effects of the heat, the citation's identification of the hazard as excessive heat stress suggests that the Secretary recognizes that some degree of discomfort is inherent in the job.” *Id.*, No. 88-348, 1992 WL 88787, at *12 (OSHRC Apr. 21, 1992).

likelihood of death or serious physical injury, and knowledge, the Court finds he failed to establish the element relating to feasible and effective means of abatement. “To establish the feasibility of a proposed abatement measure, the Secretary must ‘demonstrate both that the measure. . . [is] capable of being put into effect and that [it] would be effective in materially reducing the incidence of the hazard.’ *Arcadian*, 20 BNA OSHC at 2011 (citing *Beverly Enters. Inc.*, 19 BNA OSHC at 1190). Where an employer has undertaken measures to address a hazard alleged under the general duty clause, the Secretary must show that such measures were inadequate. *U.S. Postal Serv.*, 21 BNA OSHC 1767, 1773-74 (No. 04-0316, 2006).” *A.H. Sturgill*, 2019 WL 1099857, at *8.

1. Alternative Means of Abatement

In *A.H. Sturgill*, the Commission stated,

Before addressing this element of proof [for abatement], however, we must first determine whether the Secretary proposed each measure as an alternative means of abatement, in which case implementing any one of them would constitute abatement of the alleged violation, or as a component of a single means of abatement, in which case all of the measures must be implemented to abate the violation. If the former, the Secretary can prevail on this element only if he proves that Sturgill implemented none of the measures. . . . If the latter, he need only show a failure to implement one of them.

Id. at 2019 WL 1099857, at *9.

The Citation presents seven proposed methods of abatement for the alleged excessive heat exposure hazard:

Feasible and acceptable methods to abate this hazard include, but are not limited to:

1. Implement a heat stress management program with measures to address exposure to excessive heat. Such program may include the following:

Provide for a cool and shaded rest area. Ensure employees take their breaks in the shade or in a cool, climate-controlled area.

Develop a work/rest cycle based on validated measures of heat stress, such as a heat index or wet-bulb globe temperature index.

Limit time in the heat and/or increase recovery time spent in a cool environment.

Develop and implement procedures to be followed for heat-related emergency situations and procedures for first-aid to be administered immediately to employees in those situations. Train managers and supervisors to respond to employees reporting heat-related illness symptoms.

Assign a supervisor or other personnel to closely monitor employees for adequate hydration and work-rest cycles.

Provide training for employees prior to the arrival of excessively hot weather conditions regarding the health effects associated with heat stress, symptoms of heat induced illnesses, and the prevention of such illness.

Provide cooled air, cooled fluid or ice cooled conditioned clothing, such as ice vests or neck towels that can maintain the body's core temperature to below 98°F Fahrenheit.³³

2. Implement procedures for employees to report heat stress symptoms to management.
3. Ensure trained managers or supervisors go into the field to check on employees when National Weather Service heat advisories are in effect.
4. Training managers, supervisors, and employees in the measures to take to prevent heat-related illnesses, how to recognize the signs and symptoms of heat-related illnesses, and the procedures to follow when they or others are experiencing heat-related illnesses. Such training could be conducted annually in advance of the hot weather season and throughout the season when excessive heat is predicted. All managers, supervisors, and employees could be required to confirm their receipt and understanding of the training and records of said training could be maintained.
5. Ensure managers and supervisors are communicating to employees USPS-disseminated heat stress information, including safety talks, fully and in a timely manner.
6. Reduce the metabolic demands of the job. Provide other means of carrying and transporting heavy mail loads aside from satchels for letter carriers to relieve physiological burden during the hot summer months.
7. During the summer months where excessive heat conditions may contribute to employee safety and health issue, begin mail delivery routes earlier in the workday to aid in the completion of outdoor work prior to the hottest hours of the day.

The Secretary in *A.H. Sturgill* used the same formulation he uses in this case to introduce the list of proposed abatement methods (“Feasible and acceptable methods to abate this hazard include but are not limited to”). The Commission found

The abatement portion of the citation . . . begins with a sentence that uses and references the plural word “methods”: “Feasible and acceptable *methods* to abate this hazard include, but *are* not limited to: . . .,” suggesting that each measure is an alternative means of abatement. (emphasis added).

Id. at 2019 WL 1099857, at *9, n. 17.

³³ Dr. Bernard testified cooling towels and similar products “provide a sense of comfort but they’re not going to materially control heat stress.” (NH Tr. 1114)

In his post-hearing brief, the Secretary acknowledges the proposed abatement methods are distinct alternatives, and not components of a single abatement method. “[T]he evidence shows that USPS could have taken *several steps* to abate or materially reduce the heat stress hazard its employees faced. *These steps include* an adequate work/rest cycle, an adequate emergency response program, analyzing existing data on employees’ heat-related illnesses, employee monitoring, and reducing outdoor exposure time. By failing to implement *these or equally effective abatement measures*, USPS needlessly exposed its workers to dangerous heat stress hazards.” (Secretary’s brief, pp. 36-37) (emphasis added)

Having found the Secretary proposed alternate methods of abatement in *A.H. Sturgill*, the Commission concludes, “[I]f the record shows that Sturgill implemented any one of the Secretary’s proposed measures, or is equivocal in that regard, the abatement element of the Secretary’s burden of proof has not been established.” *Id.* at 2019 WL 1099857, at *9. So it is here. If the Postal Service implemented any one of the Citation’s seven proposed abatement methods, the Secretary cannot meet his burden on this element. The Court finds the Postal Service implemented communication of heat stress information as a method of abatement.

2. Communication of Heat Stress Information

In his post-hearing brief, the Secretary addresses five methods of abatement: 1. Work/Rest Cycles; 2. Air-Conditioned Vehicles; 3. Emergency Response and Employee Monitoring; 4. Analyzing Existing Data on Heat-Related Illnesses; and 5. Reducing Time Outdoors (Secretary’s brief, pp. 37-44).³⁴

What the Secretary does not address is the Citation’s fifth proposed method of abatement: “Ensure managers and supervisors are communicating to employees USPS-disseminated heat stress information, including safety talks, fully and in a timely manner.”

It is undisputed Benton supervisors regularly communicated heat stress information to carriers (using material from the Postal Service’s *Southern Area Heat Stress Campaign 2016*) prior to LC-1’s June 10 incident, usually during the Friday morning standup talks.³⁵ The Benton post office also provided heat stress training, including video training. Benton supervisors and carriers

³⁴ The Benton Citation does not mention air-conditioned vehicles or analyzing existing heat-related illness data in its list of proposed abatement methods.

³⁵ The Secretary argues the *Southern Area Heat Stress Campaign 2016* was inadequate but he does not dispute Benton post office supervisor regularly communicated heat stress information to carriers in standup safety talks (Secretary’s brief, p. 34).

testified extensively on this issue (Exh. C-10; Tr. 105, 127, 152, 195-96, 207-08, 254-66, 393-94, 547-50, 648, 652, 765-66, 768, 791-92, 796-802).

The Court finds the Postal Service ensured Benton Post Office managers and supervisors communicated heat stress information to its carriers, fully and in a timely manner, in accordance with the Secretary's proposed method of abatement. Under *A.H Sturgill*, this is sufficient to establish the Postal Service abated the alleged violation.

3. Economic Infeasibility

Finally, the Secretary failed to establish its proposed abatement methods regarding work/rest cycles, acclimatization programs, earlier start times, and additional paid breaks are economically feasible. It is the Secretary's burden to show his "proposed abatement measures are economically feasible. . . . In cases involving the general duty clause, the Commission has generally held that an abatement method is not economically feasible if it 'would clearly threaten the economic viability of the employer.' *National Realty*, 489 F.2d at 1266 n.37." *Beverly Enterprises, Inc.*, Nos. 91-3144, 92-238, 92-1257, 93-724, 2000 WL 34012177, at *34-35 (OSHRC Oct. 27, 2000).³⁶

Two of the Secretary's proposed abatement methods listed in the Benton Citation are:

1. Develop a work/rest cycle based on validated measures of heat stress, such as a heat index or wet-bulb globe temperature index [, and]

...

7. During the summer months where excessive heat conditions may contribute to employee safety and health issues, begin mail delivery routes earlier in the day to aid in the completion of outdoor work prior to the hottest hours of the day.

At the national hearing, the issues of additional paid breaks and acclimatization schedules were also addressed. All of these proposals would require the Postal Service to pay carriers for time during which they are not working or pay additional carriers at regular or overtime rates.

Dr. Tustin testified regarding abatement measures that he recommends the Postal Service implement to reduce its employees' exposure to excessive heat. Safety organizations use the concept of hierarchy of controls to prioritize measures to reduce hazardous exposure. The first and most effective measure is elimination of the hazard, followed by substitution, engineering controls,

³⁶The Secretary acknowledges he has the burden of proving economic feasibility of proposed abatement methods in § 5(a)(1) cases but argues an exception should be made here since the Postal Service "is unique among employers subject to OSHA's enforcement jurisdiction, because its existence is subject to Congressional oversight." (Secretary's brief, p. 45) The Court disagrees. The burden of proof remains with the Secretary.

administrative controls, and personal protective equipment (PPE) (NH Tr. 498-500). Dr. Tustin stated elimination of the hazard (hot weather) is not an option for the Postal Service, nor is substitution.

Work/Rest Cycles

Dr. Tustin discussed, as an administrative control, work/rest cycles to lower the carriers' metabolic heat. "[T]he employer would give workers rest breaks . . . and they would increase in either frequency or duration as the temperature increases." (NH Tr. 508) He advocated for a "protocol for giving more frequent breaks" such as "when the temperature reaches a certain level, workers might break for 15 minutes out of every hour and rest in a cooler location. As the temperature increases even more, there might be another threshold where they have to rest even more than 15 minutes per hour—maybe 30 minutes per hour." (NH Tr. 509)

Dr. Tustin believes the most effective use of the work/rest cycle is to require mandatory breaks. "[F]or heat-related illnesses in particular, . . . if it's progressing to heat stroke that can cause disorientation and confusion, mental status changes. So somebody who is progressing to heat stroke might not realize that they need a rest break. So relying on the worker to take a rest break could be dangerous in that situation." (NH Tr. 513) He does not think the Postal Service's policy of allowing comfort breaks is an effective administrative control. "To be honest it didn't even really appear sincere to me. The testimony that I reviewed indicated that sometimes supervisors said that workers were allowed to take extra rest breaks but then when workers either reported symptoms or said they wanted extra rest breaks; they were . . . either disciplined or supervisors became angry." (NH Tr. 514) It is Dr. Tustin's opinion, to a reasonable degree of medical certainty, that exposure to excessive heat "would have been significantly reduced in all seven incidents [cited in the five Postal Service cases before the Court] if a work/rest cycle program had been implemented." (NH Tr. 514)

Acclimatization

Dr. Tustin discussed three types of acclimatization in the context of abatement measures. First, a worker may not be acclimatized if he or she is newly hired and has not been exposed to the work environment. "In that case allowing the person to become acclimatized to heat stress is thought to be helpful." (NH Tr. 515) Second, a worker who has taken time off work, either due to vacation or illness, "might lose acclimatization or when the worker comes back the heat stress might be higher when the worker left. So allowing that worker to gradually acclimatize, . . . if the

absence has been more than about two weeks, is helpful.” (NH Tr. 515-16) The third case involves “situations where essentially the entire workforce is unacclimatized if it’s, . . . for example, a heat wave. Protecting the entire workforce somehow during a heat wave can materially reduce the hazard.” (NH Tr. 516)

Dr. Bernard recommended newly hired carriers and carriers returning after a work break follow an acclimatization schedule that builds up daily to increased heat exposure (NH Exh. C-312). He believes his recommended acclimatization is technically feasible for the Postal Service. “[I]t’s with the preplanning that goes into things. And they do plan their routes. They do have unexcused absences and others. So there’s a capability of managing how you can assign routes and a workload, so I think this fits into that possibility.” (NH Tr. 837)

Dr. Bernard acknowledged on cross-examination he did not know realistically how the Postal Service could implement his recommended acclimatization plan.

Q.: In those scenarios where, you know, you’re going to have in your opinion workers who cannot be on the street working outside because they returned from that 3-week vacation, you said they can be productive in other ways. Given what you know about the Postal Service operation, what are they going to do during that time?

Dr. Bernard: Well, I don’t know.

Q.: Okay. So you don’t know if they can be productive or not?

Dr. Bernard: Yeah, I mean, I can create scenarios and the Post Office will laugh at me. You know, so this isn’t my business, but the Post Office knows their business. . . . But the goal is, you know, is some sort of progressive increase. The classic one is 50 percent on day one. 60, 80, 100. . . . And that is the outdoor portion, the casing doesn’t count.

(NH Tr. 1080-81)

Reducing Time Outdoors

Dr. Tustin also advocated for earlier start times. Noting temperatures typically are highest between 2:00 p.m. and 4:00 p.m., Dr. Tustin recommended the Postal Service could adjust its delivery schedule, so carriers are not working during the hottest hours in the afternoon. “[I]f you shifted the work hours that they finish by 1:00 p.m. then [the carriers] would be exposed to both lower levels of environmental heat overall. So the level of heat would be lower and the amount of time that they were exposed to a hazardous level of environmental heat would be shorter.” (NH Tr. 518)

Funding the Proposed Abatement Methods

The Secretary presented no witnesses, expert or otherwise, to show funding the proposed additional rest/recovery/acclimatization/break time is economically feasible. Instead, the Secretary argues the Postal Service could simply raise prices for competitive products, such as packages, or borrow \$4 billion from the U.S. Treasury (Secretary's brief, p. 46). These suggestions are speculative and presented without evidence of their efficacy. The Secretary also claims the Postal Service is not actually operating at a deficit because it has defaulted on its financial obligations for several years.

The 2018 Presidential task force report provides a clear snapshot demonstrating six consecutive years of postal profits totaling \$3.8 billion in revenue. (DC Ex. C-135 at p.19) All of USPS's claimed losses are merely paper losses. After nine years of not paying into the Retiree Health Benefits Fund (RHBF), it is clear the prefunding mandate of the Postal Accountability and Enhancement Act is not a true expense because the act has no mechanism to enforce payment, USPS suffers no penalty from default, and it intentionally chooses to spend its revenue elsewhere.

(Secretary's brief, p. 47)

The Postal Service, in contrast, presented a detailed analysis explaining why the Secretary's proposed time-related abatements are unworkable. David Williams Jr., chief operating officer and executive vice president for the Postal Service, testified at length regarding its precarious financial condition resulting from increased competition and the obligation to prefund the RHBF (NH Tr. 1751-52). He described how the complex network of employees, contractors, facilities, airplanes, trucks, and other vehicles coordinate nationwide to meet the timetable imposed by 24-hour clock, and how one snag could create a bullwhip effect (NH Tr. 1760, 1780-81, 1783-84, 1791-92, 1795-97). Williams stated, "Every step depends on the previous step. And if we change one thing, we change another." (NH Tr. 1814)

Williams testified the Secretary's recommendations for work/rest cycles and unlimited paid breaks were economically (as well as technically) infeasible.

If you think about the 24 hour clock that I talked about the need for our carriers to get back by 6:00 p.m. so that we could meet the dispatch schedules and start that whole process around our operating plan to insure that we achieve the service expectations of our customers, when an employee can take an unlimited break for work 75 percent of the time that means that for -- at least for the one where the heat said 45 minutes work 15 minutes break for every hour, that's significant.

That impacts our ability to deliver mail on time to make the 24 hour clock. If you think about 50 percent of the time where a carrier is working 30 minutes out

of every hour, totally infeasible in terms of our ability to provide prompt, reliable and efficient service.

And then if you think of 15 minutes of work and 45 minutes of break, totally infeasible. Then the unlimited breaks, I don't know of any business, any business that provides unlimited breaks whenever anybody would want to take a break.

. . . [W]e're hemorrhaging money every day. And the costing that was performed on this analysis is in the hundreds of millions of dollars. We can't afford it.

(NH Tr. 1911-13)

The parties stipulated that the Postal Service's net losses were in the billions for 2016, 2017, and 2018:

1. In the following Fiscal Years (FY), the Postal Service's total revenue was:

2016 \$71.498 billion
2017 \$69.636 billion
2018 \$70.660 billion

2. In the following Fiscal Years, the Postal Service's total operating expenses were:

2016 \$76.899 billion
2017 \$72.210 billion
2018 \$74.445 billion

3. In the following Fiscal Years, the Postal Service's net loss was:

2016 \$5.591 billion
2017 \$2.742 billion
2018 \$3.913 billion

(NH Exh. J-100)

Dr. Do Yeun Sammi Park, financial economist for the Postal Service, testified regarding the financial impact of implementing the abatement methods proposed by the Secretary related to paid worktime.³⁷ The Court determined Dr. Park was qualified "in terms of her knowledge, skill, experience, training, and education" as an expert in economics with a "specialized expertise in cost modeling." (Tr. 1559-60)

³⁷ Dr. Park works as a financial economist for the Postal Service. She received undergraduate and graduate degrees in economics from the University of Missouri Columbia. In 2009, she received a PhD in economics from Purdue University. Dr. Park taught as a graduate instructor at both universities and was an adjunct professor at Hofstra University, teaching principles of micro- and macroeconomics. She also taught as a visiting professor at Sungshin University in Seoul, South Korea, teaching world economics and industrial organization (NH Tr. 1550-54).

She explained her process for developing a costing model to determine how much proposed changes in CBAs would cost the Postal Service. CBAs usually expire after 3 or 5 years, and then the terms have to be renegotiated.

[W]henver we do the negotiation, the major portion is an economic proposal, which is determining the wage increase, the general wage increase or COLA increase or step increase. Those are the three main parts of the wage increase.

So whenever we do the negotiation, there's a lot of proposals going on, and we – my task was to cost each economic proposal, how much it's going to cost to the USPS. . . . So I developed a fairly complicated model, the costing model. And so I polish up the model, develop it and prove it and update it before the negotiations start. And whenever the negotiation is actually going on, the main spokesperson talks to the union's head, and then they discuss – they bounce each other the proposals, and they let me -- tell me I need to cost what it's going to cost USPS 1.3 percent of general increase next year or throughout the 3-year contract. And I have to cost -- for example, it's going to cost \$800 million to the USPS. . . . So a costing model consists of basically wages and benefit part. . . . So the general increases on . . . the salaries, so that comes into it.

The benefit part, we also have to -- so whenever we increase a salary, that also affects the benefit, and we have to cost that part out. Mainly, the cost part of the benefit is -- we look at the proportion of how much, if we increase salary -- the basic salary goes up, then what's the proportion of benefit goes up with it. So those are the main big components of the costing model.

(NH Tr. 1556-58)

In August of 2018, the Postal Service asked Dr. Park to determine the cost of two proposed changes designed to reduce the exposure of carriers to excessive heat: an acclimatization program and an additional paid 5-minute break. For the acclimatization program, Dr. Park assumed the targeted carriers are returning to work after a 3-day layoff and after a 7-day layoff. For both layoff periods, Dr. Park assumed the carriers' return schedule would start the first day with restricting them to working only 2 hours outdoors, then 4 hours the second day, and then 6 hours the third day. On the fourth day, the carriers can return to their regular schedules. Dr. Park relied on the acclimatization analyses developed by Robert Mullin, a data analyst in field staffing and support for the Postal Service, to perform her cost modeling the proposed changes (NH Tr. 1473, 1560-63).

Dr. Park used a “consolidated rate” to calculate the cost. The consolidated rate is determined by combining the various wage rates for full-time, part-time, and non-career postal employees into one wage rate. She also reviewed the CBAs for city and rural carriers for details relating to guaranteed hours the Postal Service is contractually obligated to pay (NH Tr. 1564-68).

Based on her analyses of six hypothetical situations, Dr. Park determined the total costs of the acclimatization program and the paid 5-minute break:

(1) Cost of 3 Day Acclimatization and Paid Break, 4/1/2017—10/1/2017, for All Carriers:

Straight Time--\$333,877,519 Overtime--\$487,864,332

(2) Cost of 3 Day Acclimatization and Paid Break, 6/1/2017—10/1/2017, for All Carriers:

Straight Time--\$209,293,069 Overtime--\$312,124,391

(3) Cost of 3 Day Acclimatization and Paid Break, 6/1/2017—9/1/2017, for All Carriers:

Straight Time--\$179,628,724 Overtime--\$263,267,664

(4) Cost of 7 Day Acclimatization and Paid Break, 4/1/2017—10/1/2017, for All Carriers:

Straight Time--\$126,620,282 Overtime--\$188,428,747

(5) Cost of 7 Day Acclimatization and Paid Break, 6/1/2017—10/1/2017, for All Carriers:

Straight Time--\$87,849,671 Overtime--\$130,815,782

(6) Cost of 7 Day Acclimatization and Paid Break, 6/1/2017—9/1/2017, for All Carriers:

Straight Time--\$67,536,663 Overtime--\$100,540,277

(NH Exh. R-202, pp. 6-8; NH Tr. 1599-1602)

The Secretary argues these figures are inflated.³⁸

The calculation is a gross over-estimation of costs as acclimatization is not needed after a mere three or seven days off; rather, it is necessary for new workers and workers returning from a two to three week absence. Therefore the group selected for costing was over-inclusive. Further, acclimatization is generally only needed when the heat index is at least 91°F, so calculating for every single day inside a three month time period is also grossly over inclusive.

(Secretary's brief, p. 48, n. 33)

³⁸ The Secretary takes issue with the projected acclimatization costs but does not address other proposed time-based abatement costs not covered in Dr. Park's analysis. Dr. Bernard proposed a work/rest recovery cycle which would require carriers to rest for 15, 30, or 45 minutes per hour, depending on the temperature. Dr. Bernard testified he did not consider the Postal Service's 24-hour clock model, the CBA provisions, or the number of replacement workers required to complete timely mail delivery when proposing this abatement method (NH Tr. 1117-18). The Secretary did not provide an estimate of compliance costs or the effects of the costs on the existence or competitive structure of the Postal Service for Dr. Bernard's proposal.

It is not the Postal Service's burden to establish the Secretary's proposed abatement methods are economically feasible. The Postal Service has presented the analysis of a cost modeling specialist who projected the cost of implementing specified extra break and acclimatization schedules. The Secretary had the opportunity to rebut the projected costs with his own expert or to cross-examine Dr. Park more extensively on the accuracy of her projections.

“OSHA is not required to prove economic feasibility with certainty but is required to use the best available evidence and to support its conclusions with substantial evidence.” [*American Iron & Steel Institute v. OSHA* 939 F.2d 975, 980–81 (D.C. Cir. 1991) (*Lead II*)]. OSHA must also provide “a reasonable estimate of compliance costs and demonstrate a reasonable likelihood that these costs will not threaten the existence or competitive structure of an industry, even if it does portend disaster for some marginal firms.” [*United Steelworkers of America, AFC-CIO-CLC*, 647 F.2d 1189, 1272 (D.C. Cir. 1960), (*Lead I*)].

N. Am.'s Bldg. Trades Unions v. Occupational Safety & Health Admin., 878 F.3d 271, 296 (D.C. Cir. 2017).

It is the Secretary's burden to prove the economic feasibility of his proposed abatements. The Secretary did not provide an estimate of compliance costs or demonstrate a reasonable likelihood compliance costs would not threaten the existence or competitive structure of the Postal Service.

Joseph Corbett, chief financial officer and executive vice president for the Postal Service, was asked about financing the proposed acclimatization and paid break programs. He stated, “We don't have sufficient funds to even pay our existing obligations. So, no, we do not have funds to pay additional obligations. . . . We just don't have sufficient cash. We—we can't.” (NH Tr. 2383-84)

Restrictions Imposed by the CBA

Alan Moore has been the Postal Service's manager of labor relations since 2007 (NH Tr. 2211). He is responsible for contract administration for the NALC and for managing the labor relations process when rules are created or changed (NH Tr. 2214-15). His testimony illustrates how the CBA creates further obstacles to feasibly implementing the Secretary's proposed time-based methods of abatement.

The Postal Reorganization Act requires the Postal Service to bargain with its employees' labor unions. The parties bargain over wages, hours, benefits, and working conditions (NH Tr. 2216). Generally, when a contract is set to expire, the parties have an approximately 90-day window to bargain. They jointly establish the ground rules, including what discussions will be off

the record. They set up bargaining teams who work on proposals (NH Tr. 2218). The Postal Service looks at the total cost of any proposed contract. “[G]enerally there’s a *quid pro quo* process. So if the union . . . wants something, then we get something in return.” (NH Tr. 2219) During the term of the CBA, the Postal Service cannot unilaterally change wages, hours, benefits, or working conditions of the contract (MH Tr. 2225-26).

NALC is the exclusive bargaining representative of city carriers. Not all city carriers are members of NALC but the CBA for NALC applies to all of them. City carriers include career employees, who are either full-time (with 40-hour assignments) or part-time. Part time employees are divided into part-time regulars and part-time flexibles. The CBA limits the number of part-time regular employees to 682. The part-time flexible position is being sunsetted and replaced by city carrier assistants (CCAs). CCAs are non-career employees who are on a path to become career employees when a regular position opens up. The CBA limits the number of CCAs to 15 percent of the full-time employees per district, and no more than 8,000 CCAs nationwide. The Postal Service is prohibited from unilaterally exceeding any position caps set out in the CBA (NH Exh. R-117; NH Tr. 2228-34).

The CBA does not permit the Postal Service to divide a city carrier’s assignment so part of it is worked in the morning and part in the late afternoon. “[T]here’s a requirement that full-time assignments are either 8 or 9 hours within 10 hours.³⁹ [T]he 8 hours within 9 hours . . . is in offices with a hundred employees or something. There’s a baseline there. . . . So the biggest gap you can have in a regular assignment is 2 hours.” (NH Tr. 2234-35)

The CBA guarantees full-time city carriers 8 hours of work or 8 hours’ worth of pay daily. If a full-time city carrier works only 2 hours during a day’s assignment, the Postal Service still owes the city carrier for 8 hours’ pay (NH Tr. 2235-36). The Postal Service must assign overtime work first to full-time employees who have signed up for the overtime-desired list. If the Postal Service assigns an employee who is not on the list to work overtime, it must also pay the employee on the overtime-desired list for the same work (NH Tr. 2237-38).

The Postal Service has demonstrated the Secretary’s proposed time-based abatement methods threaten its economic viability. The Court concludes the Secretary has failed to establish

³⁹ The 9- or 10-hour block of time includes the 30-minute lunch break and the 10-minute morning and afternoon breaks, as well as any comfort stops (NH Tr. 2236).

his proposed abatements relating to acclimatization programs, additional paid breaks, work/recovery cycles, and earlier workday start times are economically feasible.

VIII. CONCLUSION

The Secretary has not met his burden of proving the cited conditions presented a hazard of excessive heat exposure to Benton city carriers on June 10, 2016. He has not shown the Postal Service failed to implement any of the alternative methods of abatement he proposed. And he has failed to establish the economic feasibility of his proposed abatement methods related to acclimatization programs, additional paid breaks, work/recovery cycles, and earlier workday start times.

Because the Court finds the Secretary did not prove a violation of the general duty clause, it is not necessary to address the Secretary's request for enterprise-wide abatement of excessive heat exposure for carriers.

The Citation is vacated.

IX. FINDINGS OF FACT AND CONCLUSIONS OF LAW

The foregoing decision constitutes the findings of fact and conclusions of law in accordance with Fed. R. Civ. P. 52(a).

X. ORDER

Based on the foregoing decision, it is hereby **ORDERED**:

Item 1 of the Citation, alleging a repeat violation of § 5(a)(1), is **VACATED**, and no penalty is assessed.

SO ORDERED.

Dated: July 29, 2020
Washington, DC

/s/
Sharon D. Calhoun
Administrative Law Judge, OSHRC