



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.

OSHRC Docket Nos. 16-1713, 16-1872,
17-0023, 17-0279

ON BRIEFS:

Amy S. Tryon, Senior Attorney; Heather R. Phillips, Counsel for Appellate Litigation; Edmund C. Baird, Associate Solicitor of Labor for Occupational Safety and Health; Elena S. Goldstein, Deputy Solicitor of Labor; Kate O'Scannlain, Solicitor of Labor; U.S. Department of Labor, Washington, D.C.

For the Complainant

James C. Colling, Esq.; Eric D. Gouliau, Esq.; Deborah M. Levine, Esq.; United States Postal Service, Denver, CO

Arthur G. Sapper, Esq.; Melissa A. Bailey, Esq.; Ogletree, Deakins, Nash, Smoak & Stewart, P.C., Washington, D.C.

For the Respondent

DECISION

Before: ATTWOOD, Chairman; LAIHOW, Commissioner.

BY THE COMMISSION:

Between September 2016 and January 2017, the Occupational Safety and Health Administration issued five citations to the United States Postal Service, each alleging that it committed a repeat¹ violation of the Occupational Safety and Health Act's general duty clause, 29

¹ Two of the citations (Docket Nos. 16-1713, 16-1872) were initially characterized as serious but later amended to repeat.

U.S.C. § 654(a)(1), by exposing employees to an “excessive heat” hazard.² These citations relate to medical incidents involving a total of seven letter carriers working in five different cities during the summer of 2016. In each incident, the letter carrier began feeling ill while delivering mail and subsequently was treated at a hospital or urgent care clinic. With one exception, the Secretary alleges that each carrier became ill due to excessive heat. The Postal Service contested each citation, resulting in five separate cases, each involving the occurrence of an alleged violation in the following cities³—San Antonio, Texas (Docket No. 16-1713); Des Moines, Iowa (Docket No. 16-1813); Benton, Arkansas (Docket No. 16-1872); Houston, Texas (Docket No. 17-0023); and Martinsburg, West Virginia (Docket No. 17-0279).⁴

All five cases were assigned to Administrative Law Judge Sharon D. Calhoun, who held separate hearings for each case, as well as an additional “National Hearing” to hear evidence common to all five cases. The judge did not consolidate the cases for disposition and issued five separate decisions vacating each citation. The Secretary filed a Petition for Discretionary Review applicable to all five cases, and the Postal Service filed a conditional Cross-Petition for Discretionary Review. After the cases were directed for review, the Commission instructed the parties to address the issues raised in their petitions in a single set of briefs.

We hereby consolidate the San Antonio, Benton, Houston, and Martinsburg cases (Docket Nos. 16-1713, 16-1872, 17-0023, 17-0279) because they involve the same parties and overlapping legal and factual issues, and our decision in each case rests on the same rationale with the same

² Although the citations do not uniformly use the term “excessive heat,” both on review and in the proceedings below, the Secretary claims that the basis for each citation is exposure to an “excessive heat” hazard, which he states is “also referred to as heat stress.”

³ In amended complaints filed in each case, the Secretary alleges that Postal Service employees have also been affected by excessive heat “nationwide,” and he requests “an order of enterprise-wide abatement against Respondent compelling its compliance with Section 5(a)(1) of the Act at all of Respondent’s facilities” The Secretary’s request is moot given our decision to vacate the citations. In response to this request, the Postal Service has asked the Commission to issue a declaratory order stating that a mandate of this sort is impermissible, which it contends is warranted regardless of whether the citations are vacated because such an order could potentially save the Postal Service litigation resources in the future. The Postal Service’s request is denied. *See, e.g., Ohio Forestry Ass’n, Inc. v. Sierra Club*, 523 U.S. 726, 734-35 (1998) (litigation cost saving does not justify deciding unripe issues).

⁴ According to the citations, the violations occurred on these dates in 2016: June 13 and 15 (San Antonio); June 9 and July 21 (Des Moines); June 10 (Benton); June 17 (Houston); and August 13 (Martinsburg).

outcome.⁵ See Commission Rule 9, 29 C.F.R. § 2200.9 (“Cases may be consolidated . . . on the Commission’s own motion, where there exist common parties, common questions of law or fact or in such other circumstances as justice or the administration of the Act require.”); *Cody-Zeigler, Inc.*, 19 BNA OSHC 1410, 1410 n.1 (No. 99-0912, 2001) (consolidated) (consolidating cases pursuant to Commission Rule 9). For the reasons discussed below, we vacate all four citations.

DISCUSSION

The Act’s general duty clause provides that “[e]ach employer . . . shall 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). To establish a violation of this provision, the Secretary must show: (1) “that a condition or activity in the workplace presented a hazard,” (2) “that the employer or its industry recognized this hazard,” (3) “that the hazard was likely to cause death or serious physical harm,” and (4) “that a feasible and effective means existed to eliminate or materially reduce the hazard.” *Arcadian Corp.*, 20 BNA OSHC 2001, 2007 (No. 93-0628, 2004). 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).

Here, the judge vacated the four citations at issue on the same grounds—the Secretary failed to prove (1) that the workplace conditions posed a hazard, and (2) that feasible and effective means were available to abate the hazard. We conclude that the Secretary has proven the existence of a hazard but failed to establish a feasible and effective means of abatement.⁶

I. Hazard

To establish that workplace conditions posed a hazard, the Secretary must prove there was a “significant risk” or “meaningful possibility” that they would harm employees. *A.H. Sturgill Roofing, Inc.*, 27 BNA OSHC 1809, 1811 (No. 13-0224, 2019) (citations omitted); *Quick Transport of Ark.*, 27 BNA OSHC 1947, 1949 (No. 14-0844, 2019). Determining whether conditions pose a significant risk of harm requires consideration of both the “severity of the

⁵ Since we reach a different outcome in the Des Moines case (16-1813), that citation is addressed in a separate decision also issued today.

⁶ We note that the judge did not address the other elements of the Secretary’s burden of proving a general duty clause violation and given our conclusion that abatement has not been established, we need not reach these elements.

potential harm” and the “likelihood of its occurrence,” and there is an “inverse relationship between these two elements,” meaning that as the severity of potential harm increases, its “likelihood of occurrence need not be as great.” *Weirton Steel Corp.*, 20 BNA OSHC 1255, 1259 (No. 98-0701, 2003).

As stated above, the Secretary alleges that Postal Service carriers were exposed to the hazard of “excessive heat,” which he says is “also referred to as heat stress.” The workplace conditions that posed this hazard, the Secretary contends, were the environmental and metabolic heat conditions that existed at the time these carriers worked their mail routes on the dates identified in the citations. The Secretary explains that the environmental heat conditions included the temperature and humidity levels, while the metabolic heat conditions included the distances the carriers walked and the weight of the mail loads they carried (“metabolic heat” refers to heat produced by the human body). Thus, to prove that an “excessive heat” hazard was present as alleged, the Secretary must show that the environmental and metabolic heat conditions that existed during the incidents involving the carriers subjected them to a significant risk of experiencing a heat-related illness or injury.⁷

⁷ The Postal Service suggests on review that the Secretary’s use of the term “excessive heat” fails to provide notice of the conditions at issue and that the term “violates Commission precedent,” citing *Sturgill*, 27 BNA OSHC at 1818 n.16. We reject any claim by the Postal Service that it lacked adequate notice of the nature of the hazard or workplace conditions at issue. The Secretary has made clear throughout these proceedings that he is alleging that the environmental and metabolic heat conditions present on specific dates when specific carriers worked put them at risk of experiencing a heat-related illness. In each case, the Secretary described those conditions in detail—emphasizing the temperature and humidity levels in particular—and in all but one case argued that they caused the carrier to experience heat exhaustion or another heat-related illness. The Postal Service obviously understood the Secretary’s allegation, as it called two heat stress experts as witnesses and elicited testimony from both relating to the potential for environmental and metabolic heat conditions to cause heat-related illnesses. In fact, the Postal Service repeatedly asked one of its experts to specifically evaluate whether the particular heat conditions present during the cited incidents caused the carriers’ illnesses. The Postal Service similarly questioned the Secretary’s heat stress experts. Moreover, the Postal Service does not claim that its ability to litigate these cases was prejudiced because it did not understand the nature of the hazard or conditions at issue, nor does it point to any support for such a claim.

Its other assertion—that the term “excessive heat” “violates” *Sturgill*—is also groundless. In the *Sturgill* footnote it cites in support, the Commission did not discuss the Secretary’s use of that term or say that using it in a citation would be fatal. 27 BNA OSHC at 1818 n.16. The Commission simply noted that industry documents referencing the potential for “heat” to pose a hazard did not show that the industry recognized that the cited climatological conditions were hazardous. *Id.* We note that in each case at issue here, the judge addressed the concerns raised by then Chairman

The judge explained her conclusion that the Secretary failed to establish the existence of an excessive heat hazard in a similar manner in each case, emphasizing that the Secretary did not prove that any of the incidents at issue were caused by excessive heat.⁸ Specifically, the judge

MacDougall in her *Sturgill* concurring opinion, as well as those of Commissioner Sullivan, namely that “excessive heat” is too vague a description to provide notice to an employer of the “specific, concrete environmental conditions” alleged to have put employees at risk of harm. *Id.* at 1815 n.14, 1822-23. But neither expressed that a lack of notice from a citation’s use of that term could not be cured by more precisely setting forth the nature of the conditions alleged to have been hazardous in other filings or at a hearing, or that the use of that term is fatal to the Secretary’s case regardless of whether the employer has an actual understanding of the conditions at issue or whether the employer’s ability to defend itself was prejudiced. Here, the Secretary provided sufficient notice of the specific workplace conditions alleged to be hazardous and the Postal Service’s ability to challenge that allegation was not prejudiced.

Although Commissioner Laihow agrees that the Secretary has provided sufficient notice to the Postal Service of the specific workplace conditions at issue in these cases, and as discussed below also agrees that those conditions were shown to be hazardous, she is mindful of the concerns raised by former Chairman MacDougall and former Commissioner Sullivan in *Sturgill* regarding the Secretary’s use of the term “excessive heat.” In her view, “excessive heat” is a vague term (one yet to be defined by regulation), making it difficult for employers to predict what workplace heat conditions the Secretary will treat as “excessive” under the general duty clause. A myriad of factors, such as the geographical area where the work is being performed and the nature of the tasks involved, can impact the meaning of this term. What might be considered “excessive heat” in Maine may not be considered such in Texas. In short, this term leaves employers guessing.

Therefore, Commissioner Laihow emphasizes that her conclusion in this case is limited by the instant record, which only supports a finding that the specific heat conditions that existed at the time of the specific incidents at issue in these citations were proven to pose a hazard. It does not mean she would necessarily reach the same conclusion in a future case involving similar environmental or metabolic conditions. *Cf. Sturgill*, 27 BNA OSHC at 1814-15 (expert’s opinion that alleged heat conditions could have caused heat-related illness was premised on unexplained assumptions that were inconsistent with other evidence in the record). In other words, Commissioner Laihow does not view today’s decision as establishing any sort of criteria for determining when “excessive heat” may be present. That will presumably be accomplished by the Secretary once an OSHA standard prescribing such requirements is promulgated. 29 U.S.C. § 655(b) (procedures for promulgating most new standards); *see also Kastalon, Inc.*, 12 BNA OSHC 1928, 1928-29 (No. 79-5543, 1986) (consolidated) (“Congress intended that the Secretary would primarily rely on specific standards, rather than the broad mandate of the general duty clause, to seek the correction of workplace hazards.”); *Reich v. Arcadian Corp.*, 110 F.3d 1192, 1196 (5th Cir. 1997) (“Courts have held that enforcement through the application of standards is preferred because standards provide employers notice of what is required under the OSH Act.”). *Cf. Cal. Code Regs. Tit. 8, § 3395* (Cal/OSHA standard regarding “Heat Illness Prevention in Outdoor Places of Employment”).

⁸ In the Benton case, the judge went further and found that heat did not cause the carrier’s illness.

found that one of the Secretary's expert witnesses, Dr. Aaron Tustin, who opined that all but one of the carriers suffered an illness that was caused at least in part by the heat, and one of the Postal Service's expert witnesses, Dr. Shirly Conibear, who opined that none of them experienced a heat-related illness, were equally credible.⁹ At the same time, the judge found that the "certitude" each expert expressed was at odds with their mutually consistent testimony that the symptoms of heat-related illness often mimic those of other conditions, and she accorded "no weight" to either's opinion regarding the causes of the incidents.¹⁰ The judge acknowledged that it was not "essential" for the Secretary to prove the cause of the incidents, but nevertheless found this lack of proof weighed against the Secretary's case. Finally, she found Tustin's testimony that the heat conditions during each incident were hazardous unconvincing, noting that his opinion was based on a National Weather Service (NWS) chart that she found the Secretary did not prove has a scientific basis.¹¹ The judge also noted that Tustin was unable to quantify the likelihood of a heat-related illness under any particular heat conditions. Although another expert witness for the Secretary, Thomas Bernard,¹² likewise opined that the heat conditions during each incident were hazardous, the judge did not explain why his testimony did not support the existence of a hazard.

⁹ According to the judge, both of these experts are highly credentialed and appeared "confident, knowledgeable, and trustworthy[.]" Tustin is a medical officer in OSHA's Office of Occupational Medicine and Nursing. The judge found him qualified as an expert in "occupational medicine," "heat stress exposure assessment and the epidemiology of heat-related illnesses." Conibear owns OMS, a company that provides various medical services to corporate clients, such as employee "fitness-for-duty" evaluations, where she also serves as a "senior physician." She is also the president and majority owner of Carnow Conibear and Associates, a company that conducts lead and asbestos inspections and designs remediation projects. The judge found Conibear qualified as an expert in "occupational medicine, with specialized expertise in heat stress and abatement measures that may materially reduce the hazard of excessive heat."

¹⁰ In the Benton case, however, the judge appeared to credit Conibear's opinion that the incident was not caused by heat, which Tustin did not dispute.

¹¹ The NWS chart classifies heat index danger levels, assigning them to four categories—"Caution," "Extreme Caution," "Danger," and "Extreme Danger"—representing the "Likelihood of Heat Disorders with Prolonged Exposure or Strenuous Activity." The heat index is a measurement that combines temperature and humidity levels.

¹² Bernard has a Ph.D. in occupational health and is a professor at the University of South Florida College of Public Health, where he teaches courses on occupational safety and health. The judge found Bernard qualified as an expert in "industrial hygiene" and "industrial heat stress."

On review, the Secretary argues that the testimony of his two heat stress experts, Tustin and Bernard, establishes that the workplace conditions present during each incident posed a significant risk of harm. He contends that Tustin did not base his opinion on the NWS chart, but instead relied on his own epidemiological research. In addition, the Secretary maintains that the “sheer number” of heat-related illnesses that have been reported by Postal Service carriers in recent years shows that the risk is significant, citing Postal Service injury records he contends show that nearly 2,000 carriers reported “heat-related medical incidents” from 2015 to 2018. Finally, he claims the evidence shows that all but one of the citation incidents were caused by exposure to excessive heat.

In response, the Postal Service argues that the judge properly rejected Tustin’s testimony given his reliance on the NWS chart, and that Bernard’s opinion deserves no weight for the same reason. It further asserts that Tustin based his opinion on unreliable hearsay reports of heat-related incidents in Postal Service records, and that Bernard premised his opinion on an incorrect presumption that all the citation incidents were caused by “a heat hazard,” rather than preexisting health conditions. Finally, the Postal Service relies on testimony from its expert econometrician, Joshua Gotkin, who stated that it is impossible to quantify a risk without accounting for all instances of exposure, which it contends Tustin did not do, and argues based on Gotkin’s testimony that even if all the heat-related incidents reported by carriers in recent years were assumed to have actually been heat-related, they would reflect that the odds of any given carrier on any given workday experiencing a heat-related illness “are so small that . . . [they] are really near zero”¹³

We agree with the Secretary that the judge erred in concluding the workplace conditions present at the time of each cited incident were not shown to be hazardous. Indeed, neither of the Secretary’s expert witnesses relied exclusively on the NWS chart as support for their opinions that the conditions posed a hazard to the carriers identified in the citations.¹⁴ *Cf. Sturgill*, 27 BNA

¹³ Gotkin supervises a team at Economic Research Services, a firm that provides consulting services “in the area of labor and employment.” He described himself as a “labor economist” and “applied econometrician.” The judge found Gotkin qualified as an expert in “the field of economics, with specific expertise in the field of statistical analysis and the application of statistics in sampling.”

¹⁴ As noted, Tustin and Conibear disagreed over whether the environmental and metabolic heat conditions played a “causal role” in the carriers’ illnesses. Because we find that the Secretary has established the existence of a hazard regardless of the causes of these incidents, we need not resolve this dispute. We cannot ignore, however, that some of Conibear’s testimony in this regard

OSHC at 1811-12 (Secretary's reliance on NWS chart failed to establish workplace conditions were hazardous because employees were not shown to have had "prolonged exposure" to the heat index values at which the chart advises cautions or been engaged in "strenuous activity" as contemplated by the chart). Tustin said that he examined the environmental and metabolic heat conditions present in each incident—primarily, the heat indexes and the carrier activity levels (e.g., distances walked and weight carried)—and believed that they were hazardous. When repeatedly asked what he based his opinion on, he consistently responded that it was the multiple studies on heat-related illnesses he had personally conducted, including a "systematic review" and "meta-analysis" of related published medical literature, as well as his general review of scientific papers on the topic from other authors. His mention of the NWS chart was merely to note that its heat index risk categories were "consistent" with his research.¹⁵ Nor did Tustin say that he was relying on the heat-related incident reports the Postal Service argues are hearsay and unreliable; he said that the number of such reports rose as the temperatures rose in a manner that was "completely

is quite dubious. When asked if heat "played a role" in one of the incidents, Conibear replied: "I don't know what 'played a role' means." But she did not express the same confusion when twice asked the same question at her deposition, where she herself stated that heat "may have played a role" in a carrier's illness. When asked at the hearing what she thought the phrase meant at the time of her deposition, she replied: "I really can't tell you." When asked if she understood what it meant when she used it herself at her deposition, she replied: "Probably not." Conibear also testified that heat exhaustion is "not considered to be serious," but on cross-examination admitted saying essentially the opposite at the hearing in a previous Commission case, in which she testified that it is "not usually a fatal illness" but "certainly should be considered a serious illness" These inconsistencies raise questions about the credibility of Conibear's medical opinions, such as that one of the San Antonio carriers' profuse sweating was "not related in any way" to his having walked five miles while carrying a thirty-pound satchel when the heat index was above 100°F, and her claim that he would have started profusely sweating that same afternoon even if he had been sitting at home in air conditioning.

¹⁵ Tustin's response to a single question he was asked at the hearing about the NWS chart does not support rejecting his repeated testimony that his opinion was based on his own studies and those from other authors that he has reviewed. Tustin had just explained that the NWS chart and a similar OSHA chart "essentially come to the same conclusions [regarding the risk levels associated with different heat index ranges] I've come to," when he was asked: "So you did in fact rely on the NWS heat index chart . . . ?" His response ("Yes, that's one of the things I relied on.") aligns contextually with his testimony as a whole, which reflects that he primarily based his opinion on other sources and merely found that the NWS chart provided additional, corroborating support for his independent conclusions.

consistent” with his research, but did not say he was basing his opinion that the conditions were hazardous on those reports.

We find that the judge also erred in faulting Tustin for failing to quantify the percentage of employees that will experience a heat-related illness under any particular conditions, figures that Tustin noted he was unaware of any studies calculating. It is well-established that the Secretary is not required to determine the mathematical probability of a workplace condition causing harm to show that it poses a hazard. *See, e.g., Roadsafte Traffic Sys., Inc.*, No. 18-0758, 2021 WL 5994023, at *3 (OSHRC, Dec. 10, 2021) (finding in general duty clause case that employee was at significant risk of falling from truck without discussing the mathematical probability he would fall); *Waldon Health Care Ctr.*, 16 BNA OSHC 1052, 1060 (No. 89-3097, 1993) (consolidated) (“There is no mathematical test to determine whether employees are exposed to a hazard under the general duty clause.”); *Industr. Union Dep’t, AFL-CIO v. Am. Petroleum Inst.*, 448 U.S. 607, 655 (1980) (“*Benzene*”) (plurality opinion) (“[T]he requirement that a ‘significant’ risk be identified is not a mathematical straightjacket [T]he Agency has no duty to calculate the exact probability of harm”); *Nat’l Maritime Safety Ass’n v. OSHA*, 649 F.3d 743, 751 (D.C. Cir. 2011) (“Nor is OSHA required to quantify a risk before determining that it is significant.”).¹⁶

As for Bernard, he similarly testified that he examined the heat conditions affecting the carriers involved in the cited incidents—like Tustin, he emphasized the heat indexes in particular—and believed that they were hazardous. Although Bernard referenced the heat index risk categories in an OSHA chart that is based on the NWS chart and agreed with the risk levels it assigns to heat index ranges, he never said that he believed the conditions were hazardous simply because of the OSHA chart. In the absence of any claim by Bernard to the contrary, we find that his opinion was based on his extensive expertise on heat stress, and not the risk categories in the OSHA chart.¹⁷ Nor did Bernard say that he believed the conditions were hazardous because the

¹⁶ In *Benzene*, the Supreme Court added that the Secretary is not required to support the presence of a significant risk “with anything approaching scientific certainty,” does not need to “wait for deaths to occur before taking any action,” and can make “conservative assumptions” that err “on the side of overprotection rather than underprotection.” 448 U.S. at 655-56.

¹⁷ As a college professor, Bernard has taught courses in occupational safety and health for almost thirty years and has published sixteen peer-reviewed articles, most of which concern heat stress including “several looking at the risk profiles associated with heat stress.” He regularly gives presentations on heat stress to other professionals, is a consultant for private employers on their heat stress plans, and has been retained as an expert on heat stress in at least two other litigations.

carriers experienced heat-related illnesses, as the Postal Service claims. In short, both Tustin and Bernard—neither of whom the Postal Service disputes were qualified to testify as heat stress experts—provided direct testimony that the heat conditions affecting the carriers during the cited incidents were hazardous, and we find no valid grounds for discounting either expert’s opinion.

The Postal Service presented two of its own heat stress experts, Conibear and Rodman Harvey,¹⁸ but neither challenged the consistent opinions of the Secretary’s experts that the cited conditions were hazardous.¹⁹ In fact, Harvey essentially agreed that the heat conditions posed a hazard that an employer should take efforts to mitigate, stating in a report prepared for the Postal Service that: “[b]ecause of [the Postal Service’s abatement] efforts, *the hazard presented by the ambient environmental conditions* would have been mitigated such that serious heat illness would

Bernard is also a member of the Physical Agents Committee of the American Conference of Governmental Industrial Hygienists (ACGIH) and wrote portions of heat stress guidelines published by the organization.

¹⁸ The judge found Harvey, who manages an industrial hygiene group at Conibear’s environmental health and safety consulting firm, Carnow Conibear & Associates, qualified as an expert an “industrial hygiene, with specialized expertise in assessing the risk of exposure to excessive heat.”

¹⁹ The Postal Service implies that its experts testified that the conditions were not hazardous, but the testimony it relies on provides no support for any such claim. In the transcript pages it cites, Harvey was asked about heat “Threshold Limit Values” (TLVs) published by the ACGIH. Harvey said that the TLVs are intended to mark wet bulb globe temperature (WBGT) levels at which the human body will be able to maintain its core temperature below 38°C. At the Postal Service’s prompting, Harvey read a passage from a non-admitted publication stating that “[the TLV] appears to have a margin of protection of about 3 degrees Celsius WBGT, but this margin of protection has not been sufficiently demonstrated to merit change [of the TLV] at this time.” The Postal Service then asked Harvey to add 3°C to the TLVs listed for each carrier identified in the citations on a chart—also not admitted into evidence and referred to as a “demonstrative” exhibit—which in addition to the TLVs purports to display the WBGTs during the citation incidents as well as “WBGT-CAV[s]” (clothing-allowance values); the latter are 8°F lower than the purported actual WBGT for one of the incidents and 2°F lower for all of the remaining incidents. Harvey responded that adding 3°C to the TLVs shown on that chart would result in higher figures than the WBGT-CAVs displayed on the chart for three of the incidents (and equal or lower figures for the remaining). In other words, in this rather convoluted testimony relied on by the Postal Service, Harvey did not say that the WBGTs present when the carriers worked were below the ACGIH’s TLVs or that the heat conditions were not hazardous. Moreover, Harvey said that the TLVs “are not designed to prevent heat illness,” that “you certainly can have heat illnesses below the TLV level,” and that he recommends employers take heat illness prevention steps even when the WBGT is below the TLV. He added that he “certainly” would expect some heat-related illnesses to occur when the WBGT is below the TLV plus the 3°C increase that the Postal Service’s counsel instructed him to add.

no longer be likely or the risk of them significant.”²⁰ (emphasis added). In other words, Harvey believed the conditions were hazardous but that the Postal Service was taking sufficient steps to prevent them from being likely to cause a serious heat illness. Whether an employer has taken sufficient measures to address the cited hazard, however, relates to the abatement element of an alleged general duty clause violation, which we address separately below. *See Arcadian Corp.*, 20 BNA OSHC at 2007 (Secretary must show there were feasible abatement measures that would have effectively reduced a hazard further than any measures already in use by the employer). Put simply, the issue here is only whether the Secretary has proven that the workplace conditions present at the time of the alleged violations posed a hazard, and Harvey’s statement supports that showing.

Finally, we reject the Postal Service’s claim that Gotkin’s calculations rebut the consistent opinions of three heat stress experts (Tustin, Bernard, and Harvey) that the cited workplace conditions were hazardous. Gotkin claimed that the odds of a heat stress incident occurring on what he called a “letter carrier day” in a year or during the months of May to September were “extremely small” and not “statistically significant.”²¹ We are not persuaded that his testimony provides evidence that the cited conditions were not hazardous. First, Gotkin provided no opinion on the relevant question at issue—whether the particular environmental and metabolic heat conditions present on the specified dates posed a significant risk of harm. *Sturgill*, 27 BNA OSHC at 1811. Gotkin did not opine, for example, on the odds of a carrier experiencing a heat-related illness when exposed to similar heat indexes while engaged in similar physical activity levels. He admitted having the ability to use available data to calculate such odds, but he did not do so. Instead, Gotkin simply estimated the odds of a carrier experiencing a heat-related illness under *any* environmental and metabolic conditions, regardless of whether the carrier worked in Alaska or on a rural driving route spent entirely in an air-conditioned van. In short, even if we assume based on Gotkin’s opaque testimony that the probability of any carrier in the nation experiencing a heat-

²⁰ The judge did not admit Harvey’s report, but allowed him to read excerpts into the record.

²¹ Gotkin appeared to calculate the number of “letter carrier days” in these periods by multiplying the total number of Postal Service carrier “workdays” in each period by the total number of carriers employed by the Postal Service in those periods. However, much of Gotkin’s testimony, including his description of how he calculated a “letter carrier day,” lacks context or background information that Gotkin apparently presumed would be understood. Gotkin repeatedly referenced—as did the Postal Service—his expert reports, despite those reports not being in evidence.

related illness over a twelve or five-month period was low, that does not mean that the probability of a carrier experiencing such an illness under the specific conditions at issue here was also low.

Second, Gotkin never claimed that the odds he calculated mean that the cited conditions were not hazardous, nor did he otherwise explain the import and relevance of those particular odds to this issue, and his characterization of those odds as “statistically insignificant” or “low” is not necessarily meaningful here because it is merely a relative characterization dependent on his selection of “letter carrier day” as the chosen denominator. Gotkin testified that odds in general are not “statistically significant” unless they reflect at least a one in twenty (five percent) chance of something happening. Thus, according to Gotkin, the odds of a heat stress incident occurring on a “letter carrier day” are not statistically significant unless at least one incident occurs for every twenty letter carrier days, which—since he appeared to count letter carrier days by simply multiplying the total number of employed carriers by the total number of workdays in a year—would amount to *every carrier in the nation* experiencing a heat stress incident once every twenty workdays, or put another way, five percent of all carriers in the nation experiencing an incident *every single workday*. This would equate to millions of heat stress incidents occurring every year, since the Postal Service employs around 300,000 carriers. But Gotkin himself essentially acknowledged that by simply choosing a different denominator, which he suggested could, for instance, be the total number of carriers employed in a year, far lower injury rates would then be necessary to reach what he deemed to be statistically significant. He did not say what denominator would be most sensible to use when evaluating whether a workplace condition poses a hazard, nor did he explain why he opted for “letter carrier days” over another option.

Moreover, the extreme injury rates that would be necessary for Gotkin’s “letter carrier day” odds to be “statistically significant” are drastically higher than the injury rates necessary for a workplace condition to pose a hazard under the Act’s general duty clause. *See, e.g., Science Applications Int’l Corp.*, No. 14-1668, 2020 WL 1941193, at *5 (OSHRC, Aug. 16, 2020) (fact that only one employee drowned in fifty years did not show risk of drowning was insignificant); *Schaad Detective Agency, Inc.*, No. 16-1628, 2021 WL 261573, at *3-4 (OSHRC, Jan. 15, 2021) (fact that only one employee was shot in forty-five years did not show risk was insignificant); *Peacock Eng’g, Inc.*, 26 BNA OSHC 1588, 1590 (No. 11-2780, 2017) (finding crypt installation hazardous despite “thousands of accident-free crypt installations”); *see also Integra Health Mgmt.*,

Inc., 27 BNA OSHC 1838, 1843 (No. 13-1124, 2019) (the Act generally uses terms in their ordinary sense).

Accordingly, we conclude that the un rebutted testimony of three expert witnesses supports a finding that the environmental and metabolic heat conditions present during the alleged citation incidents were hazardous. *See, e.g., Henkels & McCoy, Inc.*, No. 18-1864, 2022 WL 3012701, at *3 (OSHRC, July 12, 2022) (relying on expert’s testimony to find that condition posed a hazard), *appeal docketed*, No. 22-13133 (11th Cir. Sept. 19, 2022); *Science Applications*, 2020 WL 1941193, at *5 (existence of hazard supported by opinions of company safety official and other witness with experience and knowledge relating to the cited activity); *Mid South Waffles*, 27 BNA OSHC 1783, 1784 (No. 13-1022, 2019) (fire hazard posed by full grease drawer was supported by fire inspector’s un rebutted testimony that grease in the drawer caused a fire).

II. Feasible and Effective Means of Abatement

To establish the abatement element of a general duty clause violation, the Secretary must “specify the particular steps a cited employer should have taken to avoid citation, and demonstrate the feasibility and likely utility of those measures.” *Beverly Enters., Inc.*, 19 BNA OSHC 1161, 1191 (No. 91-3144, 2000) (consolidated); *see also BHC Nw. Psychiatric Hosp., LLC*, 951 F.3d 558, 564-66 (D.C. Cir. 2020) (citations omitted) (Secretary must show that the employer failed to implement measures that “a reasonably prudent employer familiar with the circumstances of the industry” would have taken). “Feasible” means both “economically and technologically capable of being done.” *Beverly Enters.*, 19 BNA OSHC at 1191. A measure is not economically feasible if it would “threaten the economic viability of the employer.” *Id.* at 1192 (quoting *Nat’l Realty & Constr. Co. v. OSHRC*, 489 F.2d 1257, 1266 n.37 (D.C. Cir. 1973)). To establish a measure’s utility, the Secretary must show that it would “eliminate or materially reduce the hazard.” *Mo. Basin Well Serv., Inc.*, 26 BNA OSHC 2314, 2316 (No. 13-1817, 2018).

Here, the Secretary identified a number of abatement measures in the four citations at issue before us, as well as in his post-hearing briefs. In three of the cases (San Antonio, Benton, and Martinsburg), the judge determined that these measures were proposed as alternatives and concluded that the Secretary failed to establish the abatement element because the Postal Service had already implemented one of the proposed measures (training employees on the recognition and prevention of heat-related illnesses). *See Sturgill*, 27 BNA OSHC at 1818. In those three cases, the judge also found that the Secretary failed to prove that some of the other proposed

measures were economically feasible. In the remaining case (Houston), the judge did not address whether the measures were proposed as alternatives, concluding that the abatement element was not proven because some of the measures were not shown to be economically feasible, some were not shown to provide a material hazard reduction, one measure (training) had already been implemented, and two measures raised in the Secretary’s post-hearing brief were not identified in the citation.

On review, the Secretary contends that he did not propose the abatement measures as alternatives in any of these cases, but rather proposed a “multi-element heat stress program” that would include different elements “such as work/rest cycles, an adequate emergency response program, analyzing existing data on employees’ heat-related illnesses, employee monitoring, training, and reducing outdoor exposure time.” Regarding economic feasibility, he claims the evidence shows that “paying for measures to abate the hazard” would not threaten the Postal Service’s economic viability. The Secretary presents no arguments regarding the efficacy of these proposed measures in materially reducing or eliminating the cited hazard. In response, the Postal Service maintains that the Secretary proposed the abatement measures as alternatives in every case except Houston, and that the judge correctly found that one of the alternatives (training) had already been implemented in those three cases. In every case, the Postal Service also argues the Secretary failed to show that any of the proposed measures were feasible or effective, or that a reasonable employer would have done more than what it was already doing to protect employees.

A. How the Secretary Proposed the Abatement Measures

We agree with the Secretary that he did not allege that any of the proposed abatement measures would have been sufficient by themselves to abate the excessive heat hazard. *Cf. Sturgill*, 27 BNA OSHC at 1818 (when the Secretary proposes abatement measures as alternatives, proof of abatement element requires showing employer did not adequately implement any of the measures). Nowhere in his complaints, citations, or post-hearing briefs did the Secretary suggest that the abatement measures would each singlehandedly eliminate an excessive heat hazard. *See UHS of Westwood Pembroke, Inc. (“Westwood”),* No. 17-0737, 2022 WL 774272, at *4 (OSHRC, Mar. 3, 2022) (Secretary’s filings did not propose alternative abatement options), *appeal docketed*, No. 22-1845 (3d Cir. May 2, 2022). To the contrary, his complaints all allege that the Postal Service violated the general duty clause by failing to implement a “comprehensive program” to address the cited hazard that includes “*all* feasible means of abatement” *See id.* at *8 (finding

Secretary's assertion in post-hearing brief that employer might need to implement "multiple abatement measures" showed alternatives were not proposed). And all but one of the citations at issue introduce the abatement measures by stating that "methods . . . include, but are not limited to, the following: [listing measures]."²² The Secretary's post-hearing briefs all introduce the measures in a similar manner: "[T]he evidence shows that Respondent could have taken several steps to abate or materially reduce the hazard its employees faced. These steps include [list of proposed measures]."²³ These simple and generic introductions do not mean that any one of the measures listed would by itself resolve the hazard, which would contradict the Secretary's position in his complaints.²⁴

Moreover, the testimony elicited at the National Hearing shows that both parties clearly understood the abatement measures were not proposed as alternatives. For example, the Secretary asked Tustin whether the Postal Service could use its data on reported heat-related incidents when adopting "an overall heat stress program." Tustin replied that such information would be useful when adopting such a "program." The Secretary also asked Tustin whether providing air-conditioned vehicles—one of the Secretary's proposed measures—would be as effective if the Postal Service did not also mandate rest breaks (a component of another proposed measure, work/rest cycles). Tustin replied that air-conditioned vehicles should be used *together* with mandatory rest breaks taken inside the vehicles. Similarly, Bernard testified that acclimatization—another proposed measure—was an "important component" of "a heat stress management program." He said that such a program should include various components, such as "training," "virtual buddy systems and work/rest cycles" (three of the measures listed by the Secretary in the citation), and other "things of that sort" The Postal Service also understood the measures could address the hazard in this combined manner. For example, the Postal Service asked Tustin

²² The Houston citation, which the Postal Service agrees *does not* propose alternatives, states: "Among other methods, one . . . method . . . is to follow the guidelines contained in [multiple OSHA and NIOSH publications]: [followed by list of measures]."

²³ The Martinsburg post-hearing brief uses "many steps" rather than "several steps."

²⁴ In *Sturgill*, the Commission mentioned in a footnote that a citation's use of "the plural word 'methods' " in the phrase "methods . . . include, but are not limited to," could "suggest" that each measure was intended as an alternative means of abatement. 27 BNA OSHC at 1818 n.17. But the Commission did not say that the mere use of the word "methods" means that the Secretary is proposing alternative methods. *Id.* See *Westwood*, 2022 WL 774272, at *8 (whether alternatives were proposed turns in part on parties' understanding reflected in record as a whole).

if he believed an acclimatization program “would be adequate as long as you had other measures in place, such as rest breaks or monitoring?”

Finally, the nature of these proposed measures shows that the potential benefit each could provide would be cumulative, making it implausible that the Secretary would have proposed them as alternatives or that the Postal Service would have so understood them. *See Westwood*, 2022 WL 774272, at *8 (noting that the parties’ understanding that the measures were not alternatives aligned with “the nature” of the hazard at issue (workplace violence), which “arises in different contexts and conditions” and “necessitate[es] different abatement measures.”) In sum, we find the Secretary did not propose his measures as alternatives nor did the parties litigate them as such.

B. Adequacy, Feasibility, and Efficacy

To establish the abatement element in a case in which the measures are not proposed as alternatives, the Secretary must show that at least one of the proposed measures (or some combination) was not adequately implemented and would have been feasible and effective in materially reducing (or eliminating) the hazard. *See id.*; *The Duriron Co.*, 11 BNA OSHC 1405, 1408 n.3 (No. 77-2847, 1983), *aff’d*, 750 F.3d 29 (6th Cir. 1984); *Kelly Springfield Tire*, 10 BNA OSHC 1970, 1975 n.5 (No. 78-4555, 1982), *aff’d*, 729 F.2d 317 (5th Cir. 1984). As part of this showing, the Secretary must establish that any steps the employer took to address the hazard at issue were inadequate. *Mo. Basin*, 26 BNA OSHC at 2319. As noted, a proposed abatement measure is feasible if it is “economically and technologically capable of being done.” *Beverly Enters.*, 19 BNA OSHC at 1191. When evaluating economic feasibility, the Commission may consider “whether the cost of compliance would jeopardize a company’s long-term profitability and competitiveness.”²⁵ *Waldon Health*, 16 BNA OSHC at 1063.

On review, the Secretary broadly argues that he established the feasibility and efficacy of the abatement measures he proposed below, briefly naming a few. While he does not describe those proposals in detail, the Secretary specifically argued before the judge in each case that feasible and effective measures to abate the heat hazard include: (1) work/rest cycles; (2)

²⁵ The Postal Service argues for the first time on review that the Secretary is also required to show that the “expected costs” of his proposed measures are “reasonably related to their expected benefits” to establish their feasibility. As this argument was not raised below, we decline to address it. Commission Rule 92(c), 29 C.F.R. § 2200.92(c) (“The Commission will ordinarily not review issues that the Judge did not have an opportunity to pass on.”).

emergency response plans and employee monitoring;²⁶ (3) analyzing Postal Service data on employee heat-related illnesses; and (4) reducing employee time outdoors. In three of the cases (Benton, Houston, and Martinsburg), the Secretary additionally argued in support of the use of air-conditioned vehicles, and in two of the cases (Houston and Martinsburg), the Secretary additionally addressed training employees on heat-related illnesses. Finally, in one case (San Antonio), the Secretary also discussed acclimatization.²⁷

Like the judge, we consider three of the Secretary’s proposed measures together—work/rest cycles, reducing time outdoors, and acclimatization—because they all address abating the hazard by limiting employee exposure, and the judge found that all three of these “time-based” measures were not shown to be economically feasible.²⁸ We then discuss the remaining measures in turn.

Work/Rest Cycles, Reducing Time Outdoors, and Acclimatization

In his post-hearing briefs, the Secretary described two of the time-based abatement measures—work/rest cycles and reducing time outdoors—in a similar fashion in each case. He explained that work/rest cycles refers to increasing either the frequency or duration of rest breaks “as heat stress levels increase.” Citing testimony from Tustin and Bernard, the Secretary argued that the Postal Service’s existing policy of allowing carriers to take extra breaks in hot weather was inadequate because it did not include a “mechanism” for carriers to actually do so, and because in practice such breaks were discouraged. As for reducing time spent outdoors, the Secretary

²⁶ In the San Antonio and Benton cases, the Secretary referred to “Emergency Response and Employee Monitoring” as a single category of abatement measure. In the Houston and Martinsburg cases, the Secretary treated “Emergency Response” and “Employee Monitoring” as separate categories.

²⁷ The citations include a few other proposed measures that the Secretary did not discuss in his post-hearing briefs and therefore, we do not address them. *See Peacock Eng’g*, 26 BNA OSHC at 1593 (not addressing measures listed in citation that Secretary did not defend to judge); *Roberts Pipeline Constr., Inc.*, 16 BNA OSHC 2029, 2030 (No. 91-2051, 1994) (Commission not obligated to “develop arguments not articulated by the parties . . .”), *aff’d*, 85 F.3d 632 (7th Cir. 1996) (unpublished).

²⁸ The judge specifically identified these time-based measures as “relating to acclimatization programs, additional paid breaks, work/recovery cycles, and earlier workday start times[.]” While the Secretary did not identify “additional paid breaks” as a separate abatement category, his work/rest cycles, reducing time outdoors, and acclimatization proposals all involve giving carriers additional paid rest time. The Secretary proposed earlier workday start times as one manner of accomplishing his reducing time outdoors proposal.

claimed that carrier schedules could be adjusted so that the carriers are outdoors as little as possible during the hottest part of the day. He also asserted that the Postal Service could “eliminate extra work during hotter weather.” In the Houston and Martinsburg cases, the Secretary further claimed that a carrier’s time outdoors could be reduced by having another carrier assist with the route.

In the San Antonio case only, the Secretary argued that acclimatization is an appropriate measure to use for new employees not previously exposed to high heat levels, as well as employees who have lost heat acclimatization following an at least two-week absence from work. Citing Bernard’s testimony, the Secretary described two acclimatization methods: (1) reducing the daily duration of an employee’s heat exposure and gradually increasing such exposure over several days; and (2) treating the heat index to which an employee is exposed as higher than it is, such as by adding ten degrees to it on the first day, and then implementing any heat-stress protections for the employee that would be triggered by that higher heat index, such as work/rest cycles.

Economic Feasibility

The judge found that the Secretary failed to establish that these time-based measures were economically feasible because he failed to “provide an estimate of compliance costs or demonstrate a reasonable likelihood that such costs would not threaten the existence or competitive structure of the Postal Service.” Further, the judge concluded that paying for these measures would in fact threaten the Postal Service’s economic viability. In doing so, she cited testimony from Postal Service economist, Do Yeun Sammi Park, who the judge found was qualified to testify as an expert in economics with “specialized expertise in cost modeling,” in considering the costs associated with implementing these measures.²⁹ Park provided several estimates of the annual labor cost the Postal Service would have to incur to adopt an acclimatization program and give carriers an additional five-minute paid break, using different assumptions about the implementation of these measures. Her lowest estimate using an overtime rate, which she said was more “realistic” than using a “straight-time” rate, was that implementing these measures would cost about \$100 million per year (about \$50 million for each). Other evidence the judge relied on in concluding that the Postal Service could not afford this expense is the parties’

²⁹ At the hearing, Park said she had been employed as a “financial economist” at the Postal Service for one month, and prior to that had worked as a “labor economist” for the Postal Service. Her duties in the latter role included providing cost estimates for potential wage increases during union negotiations.

stipulation that the Postal Service experienced billions of dollars in net losses from 2016-2018. The judge also pointed to Postal Service Chief Financial Officer (CFO) Joseph Corbett's testimony that the organization lacked the money to pay for these measures: "We don't have sufficient funds to even pay our existing obligations. So, no, we do not have funds to pay [for those] additional obligations."

On review, the Secretary does not dispute that these time-based abatement measures would impose financial costs. But he maintains that such costs would not threaten the Postal Service's economic viability, for several reasons: (1) the Postal Service is unlikely to go out of business for financial reasons because it is a "quasi-governmental agency" and Congress will prevent that; (2) the losses it has experienced are only "paper losses" because they are the result of a statutory obligation to prefund retirement health benefits that the Postal Service has not complied with and that has not been enforced; (3) it can raise prices or borrow funds to pay for the measures; and (4) it plans to spend money on other projects in coming years, including measures to increase productivity, and could reallocate that money to pay for the proposed measures instead. The Secretary also argues that Park's estimated \$100 million annual cost for an acclimatization program and an extra five-minute break is a small amount relative to the Postal Service's overall expenses and could be covered by its revenue if its retirement obligations are not considered.

In response, the Postal Service echoes the judge's analysis and argues that paying for these measures will prevent it from meeting its statutory obligation to provide the "essential public service" of universal mail delivery. The Postal Service relies on testimony from its Chief Operating Officer, David Williams Jr., who stated that the Postal Service is projected to run out of money in coming years (he predicted this would happen in 2024), and that the abatement costs would "accelerate" that result, at which point the organization's ability to provide universal postal services would be threatened. The Postal Service also maintains that it already gives carriers "rest, lunch, and unlimited comfort breaks" and acclimatizes new carriers through its on-the-job training program, and argues that the fact that thousands of other carriers delivered mail on the same dates at issue in the citations without incident shows that the Secretary's proposals are unnecessary. Regarding Park's estimate of the cost of a single five-minute break, the Postal Service contends that the Secretary did not show (or even claim) that providing such a break would materially abate the hazard, and it maintains that the actual cost of the Secretary's work/rest cycles proposal would be much higher.

We agree with the Postal Service that the Secretary has failed to establish that any of his time-based abatement proposals—work/rest cycles, reduced time outdoors, and acclimatization—are economically feasible. As the judge noted, the Secretary has provided no estimates of the costs for any of these measures.³⁰ *Cf. Am. Iron & Steel Inst. v. OSHA*, 939 F.2d 975, 980 (D.C. Cir. 1991) (“To prove economic feasibility [of a promulgated standard], OSHA must construct a reasonable estimate of compliance costs . . .”) (citation omitted). Instead, the Secretary simply relies on Park’s testimony and claims that it would “cost as little as \$100 million” to provide a five-minute daily break and to acclimate carriers who are off work for more than seven consecutive days, even though as the Postal Service points out, the Secretary has never claimed that abatement could be accomplished simply by giving carriers a single additional five-minute break, let alone shown that a single such break would be materially effective. In fact, the Secretary has never said how much rest time or reduced work hours would accomplish his “work/rest cycles” or “reducing time outdoors” proposals (he acknowledges on review that he does not suggest “any specific schedule”), but he elicited testimony from Tustin and Bernard that carriers might need to take fifteen to forty-five-minute rest breaks *every hour*. In short, Park’s cost estimate does not even reflect the Secretary’s actual proposal.

This is also true with regard to acclimatization. Before the judge, the Secretary argued that Park’s estimate of the annual labor costs to acclimate carriers who have been away from work for at least one week during the months of June to August was an over-estimate because acclimatization is only needed for new carriers and carriers returning from a two-week absence, and is “generally only needed when the heat index is at least 91°F . . .” But the Secretary provided no cost estimate for his narrower acclimatization proposal and cited no evidence to support his claim that it would necessarily be lower than Park’s figure. For its part, the Postal Service contends that Park’s figure is an *under*-estimate because it only reflects labor costs and does not take into account other business impacts. With no evidence to support the Secretary’s claim, we have no basis for determining who is correct. In short, because the Secretary has never identified the specific costs associated with his time-based abatement measures or, as discussed below, pointed

³⁰ Nor did the Secretary provide estimates of the costs for any of his other proposed abatement measures, which we address below, though he does rely on the fact that the Postal Service is already planning to purchase air-conditioned vehicles to support the economic feasibility of that particular proposal.

to evidence that supports their economic feasibility irrespective of such costs, the record lacks sufficient information to evaluate whether these measures are economically feasible.

Even if we were to assume that two of these time-based measures could be accomplished by spending about \$100 million annually, the Secretary has not shown that this cost would not threaten the Postal Service's economic viability. The Secretary has never disputed that, at least on paper, the Postal Service did not have this money as of the time of the hearing. As noted, COO Williams said his "best guess" is that the Postal Service will "run out of cash" in 2024, at which point it would no longer be able to pay employees and suppliers; he said that additional spending on a heat-related abatement measure would increase the Postal Service's losses and "accelerate[] the point in time in which the Postal Service could run out of operating cash flow to keep [the] organization going."³¹ CFO Corbett similarly testified that the organization is projected to run out of "operating cash" in 2024, resulting in it not being able to fully pay employees and potentially beginning a "downward spiral." While he found it "unlikely" that the Postal Service would completely "close up shop" at that point, he believed it would "certainly have to cut back on services, which would require cutting back on employees and cutting back on facilities, . . . irreparably damaging the brand and putting in danger our ability to fulfill the universal service obligation." Like Williams, he said that paying for these abatement measures would "accelerate the day of reckoning . . . in terms of running out of cash."

³¹ Williams further testified as follows:

Q. In 2024 is it your prediction that the Post Office is going out of business?

A. That's my best guess. That's just a guess. . . .

Q. And the organization could literally die?

A. It could.

Q. And Congress will let that happen in your opinion?

A. I don't know. I can't predict what Congress may or may not do. . . . My best guess is that we will get some kind of legislative relief before that happens. But I don't know. I can't predict that.

These claims are corroborated by a December 2018 report from the Task Force on the United States Postal System,³² which describes the Postal Service’s “financial burden” as a potential “existential threat” to its operations:

The USPS has been losing money for more than a decade and is on an unsustainable financial path.

...

Both administrative and legislative actions are needed to ensure that the USPS does not face a liquidity crisis, which could disrupt mail service and require an emergency infusion of taxpayer dollars.

...

Without appropriate structural reform, the USPS’s growing financial burden and its unsustainable business model pose an existential threat to its operations.

A February 2017 report from the U.S. Government Accountability Office (GAO) regarding the Postal Service’s “Fiscal Sustainability” makes similar findings, classifying the organization as “high-risk” and stating that its “deteriorating financial condition is unsustainable” and its “mission of providing prompt, reliable and efficient universal services to the public is at risk.”

We find that this evidence collectively shows that the Postal Service’s financial condition is dire and it is already at risk of financial collapse, an outcome that would be expedited by additional expenses. The Secretary’s various attempts to refute this compelling evidence are unsupported. According to the Secretary, spending \$100 million would not be “the tipping point” for the Postal Service because it is a small amount relative to its overall budget, but he cites no evidence to support such a claim. The Secretary also contends that additional expenses would not threaten the Postal Service’s economic viability because Congress would never allow the Postal Service to cease to exist. This claim is highly speculative. The only evidentiary support the Secretary cites for this theory is Williams’ testimony that his “best guess” is that the Postal Service would “get some kind of legislative relief” before going out of business and Corbett’s testimony that he believed it “unlikely” the organization would completely close. But Williams expressly said he did not know and could not predict what would happen, and Corbett said he believed the Postal Service would at least have to cut back on services, employees, and facilities, damaging its brand and threatening its ability to fulfill its universal service obligation.

³² On April 12, 2018, President Trump signed an executive order that established this Task Force and charged it with evaluating the Postal Service’s operations and finances, and issuing recommendations for the organization to achieve a sustainable business model.

The Secretary also points out that the Postal Service has to date continued to function despite yearly losses. But he has presented no evidence to rebut Williams and Corbett’s projection that the Postal Service will run out of money and be unable to pay its financial obligations in 2024, a claim corroborated by the Task Force’s assertion that the organization is facing an “existential threat” from its financial condition, as well as the 2017 GAO report’s finding that it is at “high-risk” and financially unsustainable. Given this evidence, it would be unreasonable to presume from the fact that the Postal Service has continued to operate to date that its viability is not at risk in the future.

The Secretary’s contention that budget shortfalls can be alleviated by simply raising prices or borrowing money to pay for additional expenses suffers from the same lack of evidentiary support. Although the Postal Service has the *ability* to take these steps, the Secretary has not shown that either would be economically advisable or ultimately result in additional funding.³³ A June 2018 GAO report regarding the Postal Service’s projected capital spending, for example, states: “[E]ven if USPS raises rates, it may not see an increase in revenues [A] rate increase could lead to a decrease in volume that might offset additional revenue from the rate increase.” In its 2018 Annual Report to the SEC (Form 10-K), the Postal Service stated that it already attempts to set its prices for its “Competitive Services” at levels that will “maximize revenue.”

Finally, the Secretary points out that the Postal Service plans to spend money on various other projects going forward and contends that it could reallocate those funds to pay for the proposed abatement measures instead. But this simplistic claim is unsupported by evidence that doing so would be economically viable or even the best use of the Postal Service’s resources to promote employee safety. The Secretary cites the 2018 GAO report, which states that “USPS projects average annual capital cash outlays of \$2.4 billion from fiscal years 2018-2028,” an amount “largely driven” by its “plans to acquire a new fleet of delivery vehicles,” but that also includes “facilities, information technology, and mail-processing equipment.” The report immediately adds: “However, USPS faces a serious financial situation with insufficient revenues to cover expenses. This uncertainty may result in USPS’s making capital spending tradeoffs”

³³ The Postal Service’s 2018 Annual Report to the SEC (Form 10-K) states that the organization can raise rates on services with approval from the Postal Regulatory Commission, though its “market-dominant” services are subject to a price cap based on the consumer price index. The report also states that the Postal Service can borrow money as long as its debt does not exceed \$15 billion (a maximum imposed by statute), and that its total existing debt in 2018 was \$13.2 billion.

Future spending, the report explains, will depend on future revenues, “will likely involve prioritization decisions,” and the “uncertain outlook may result in USPS changing its current capital spending plans”

Given the spending tradeoff decisions that will likely already be necessary, the GAO report shows that diverting future projected spending could be counterproductive to the objective of maximizing employee safety while maintaining economic viability. The GAO report states that most of the Postal Service’s projected additional spending is to replace its aging delivery fleet and projected spending on facilities is mostly for the “rehabilitation and repair of existing facilities,” such as fixing “roofs or heating, ventilation, and air-conditioning.”³⁴ Other projected spending includes the purchase of new information technology equipment, including “video conferencing systems intended to increase productivity and encourage collaboration,” as well as spending on cybersecurity and hardware. The record does not show that shifting any of these expenditures to the proposed abatement measures would better advance employee safety and the organization’s economic viability. For all of these reasons, we find that the Secretary has not proven that his proposed time-based abatement measures are economically feasible.

Technical Feasibility

In addition to finding the time-based measures economically infeasible, the judge found that they would likely be technically infeasible as well due to their impact on carrier work schedules. Citing COO Williams’s testimony, the judge observed that delivering the mail requires the nationwide coordination of a complex network of employees, facilities, and vehicles in a “24-hour clock” schedule, and “one snag could create a bullwhip effect.” In addition, the judge found that the Postal Service’s collective bargaining agreements (CBAs) with the carrier unions would pose “obstacles” to these time-based measures, such as their limitation on the number of employees who can work part-time and prohibition on the Postal Service making unilateral changes to hours or working conditions.³⁵

³⁴ According to Corbett, an investment review committee decides what projects to prioritize—for example, if a roof were leaking or at risk of collapsing, replacing it would be made a priority. At the same time, he said that the Postal Service has imposed a general moratorium on purchasing furniture.

³⁵ The Postal Service has a CBA with the National Association of Letter Carriers (NALC), a union that represents all “city letter carriers.” It has a separate CBA with the National Rural Letter Carriers Association, which represents all “rural letter carriers.”

On review, the Secretary does not address the technical feasibility of his time-related measures at all (apart from opining in a footnote that the 24-hour clock schedule should not be “sacrosanct”). Before the judge, he cited only to Bernard’s opinion that it would be feasible for the Postal Service to implement the work/rest cycles and acclimatization measures because part-time carriers or “temporary workers” could be “brought in.” But as the Postal Service points out, Bernard subsequently admitted that he offered that opinion without knowing or considering what is in the CBAs, what the “mail cycle” is, or what the Postal Service’s delivery obligations are. Because the Secretary neither addresses these concerns nor points to any other evidence to support the technical feasibility of the time-based measures, we find that he failed to meet his burden on that issue.

In any event, we agree with the judge—whose findings the Postal Service echoes on review—that implementing any of these measures would create serious challenges for the Postal Service in coordinating its nationwide delivery network and complying with certain CBA provisions. To reduce carrier workloads and time spent outdoors during hot days as proposed, the record shows that the Postal Service would have to either slow or alter delivery schedules or make extra employees available to assist.³⁶ Williams testified that slowing or altering delivery schedules in response to hot weather would prevent the Postal Service from delivering the mail on time and cause cascading backups in its complex transportation network: “Every step depends on the previous step. And if we change one, we change another. The one thing we can’t change is the transportation.” According to Williams, it takes months to adjust truck and plane schedules, and there is no “agile” way to shift those schedules in response to hot weather.

Changes to carrier schedules would also need to be negotiated with the unions, because the CBAs do not allow the Postal Service to make unilateral changes. If the Postal Service were to have additional carriers assist on hot weather days rather than slow delivery schedules, the CBAs also could pose technical challenges. The National Association of Letter Carriers’ (NALC) CBA requires that full-time carriers be given eight paid hours per shift, including on non-scheduled workdays, and it limits the percentage of carriers who can work part-time.

³⁶ If reducing time outdoors were accomplished by structuring carrier schedules to avoid the hottest part of the day (e.g., having carriers begin their routes earlier), rather than through additional break time, it might not slow down delivery schedules. But it would require ad hoc schedule alterations with similar technical challenges.

We also question whether the Secretary has established the feasibility of adjusting carrier work schedules to avoid the hottest hours given his failure to address the Postal Service's claim that doing so would require carriers to deliver in low or no light conditions, which might pose other safety concerns such as an increased risk of falls and vehicle accidents, both of which the Postal Service contends are far more common among carriers than heat-related illnesses.

In sum, we find that the Secretary has failed to establish that work/rest cycles, acclimatization, and reducing time outdoors are feasible abatement measures, economically and technically.³⁷

Emergency Response Plans and Monitoring

The Secretary described his "emergency response plans" and "employee monitoring" measures similarly in each case below. He alleged that the Postal Service's procedures for discovering and responding to an employee experiencing symptoms of a heat-related illness were inadequate. Specifically, the Postal Service trains carriers to call a supervisor if they experience symptoms of a heat-related illness, and to call 911 if their symptoms are severe.³⁸ The Secretary argued for two specific changes to these procedures: (1) a "virtual buddy system" that would allow carriers to "keep in contact with a designated individual to gauge how [they each] are feeling" and allow them to "actively discuss[] how they feel" instead of waiting until their symptoms become "overwhelming;"³⁹ and (2) instructing carriers to contact the Postal Service's "occupational health

³⁷ Regarding work/rest cycles, we find that the Secretary also failed to establish this method would be materially effective because he does not explain what this measure would specifically entail. He claims that the Postal Service, which already provides carriers with rest breaks, should give more breaks when heat conditions are hazardous, but does not say how many more or under what particular heat conditions such breaks should be given. *See Mid South Waffles*, 27 BNA OSHC at 1786 (Secretary's proposal that employer clean grease drawer without saying how often to do so proposed a result to be achieved, not a specific abatement method); *Nat'l Realty*, 489 F.2d at 1268 ("[T]he Secretary must be constrained to specify the particular steps a cited employer should have taken to avoid citation . . ."). Bernard testified that he included a chart with work/rest guidelines in his expert report, but the Secretary did not propose that the Postal Service adopt those guidelines and Bernard's report was not admitted into the record.

³⁸ In the San Antonio, Houston, and Martinsburg cases, the Postal Service stated that it also monitors carriers by having supervisors sometimes go out on routes to check on them. And in the Benton case, it said that carriers are "adequately monitored to ensure adequate hydration and rest," but did not say how they are monitored.

³⁹ In a footnote in his San Antonio Post-Hearing Brief, the Secretary stated that supervisors could also use a GPS tracking system to identify carriers who are moving slowly and call to check on them. In response, the Postal Service argued that this proposal is too vague and cited testimony

services program,” which is staffed by physicians and nurses, if they experience symptoms of a heat-related illness.

Although the judge did not discuss these proposals in the San Antonio, Benton, and Martinsburg decisions, she found in the Houston decision that the Secretary failed to prove they would be materially effective beyond the procedures the Postal Service already had in place. We find that the Secretary has not shown in any of the cases that either measure would be feasible or materially effective. Regarding the buddy system, the Secretary never explained what this system would specifically require of carriers, such as whether they would be required to contact each other at specified intervals, and if so, what the feasible but also effective intervals would be. *See Mid South Waffles*, 27 BNA OSHC at 1789-90 (Secretary must explain what the abatement measure would require with specificity); *Nat’l Realty*, 489 F.2d at 1268 (“[T]he Secretary must be constrained to specify the particular steps a cited employer should have taken to avoid citation . . .”). When asked if a virtual buddy system would have “significantly reduced the hazard,” Bernard replied that he thought it would because it would offer “the potential to address the signs and symptoms much earlier . . .” But he did not say how often carriers would need to contact their buddy to achieve this benefit or discuss the feasibility of any specific schedule. It is also unclear from Bernard’s testimony whether this measure would offer a material improvement beyond the Postal Service’s current procedures. In fact, Bernard agreed that if carriers “call 9-1-1 [when] they experience signs or symptoms” they will be “no less safe than if they called their virtual buddy or called their supervisor.”

As for requiring carriers to contact the Postal Service’s occupational health services program, Tustin opined that if carriers could quickly speak to a nurse or physician in that program, it would eliminate “any delays” and any “potential conflicts of interest talking to a supervisor,” as well as avoid “having someone who is not really medically knowledgeable triaging illnesses.” At the same time, Tustin acknowledged that the Postal Service’s current practice of instructing carriers to “simply call 911” if their symptoms are severe was just as effective as calling someone from the occupational health program. And the Secretary points to no evidence that implementing

that it would be infeasible for supervisors to watch a monitor throughout the day to determine whether any of the many carriers delivering mail had stopping moving. The judge did not address these arguments. In any event, we agree that the Secretary did not show this measure was feasible or that it would have been materially effective.

this measure would have been feasible. He did not explain, for example, how many occupational health professionals are available at any given time, whether they are available to take such calls, or whether additional staff would need to be hired. Thus, we find the Secretary has not shown that his emergency response and monitoring proposals are either feasible or effective.

Analyzing Data

The Secretary claimed in each of his post-hearing briefs that the Postal Service could materially reduce the excessive heat hazard by evaluating its own heat-related illness data “to understand the causal factors, and use that information to create an effective heat stress program.” In support, the Secretary cited Tustin’s testimony that analyzing such data would allow the Postal Service to determine what “environmental conditions are associated with heat-related illnesses in their workforce,” and pointed out that Tustin himself analyzed the data in this manner and created a chart showing how the number of incidents correlates with temperature levels.

The Secretary, however, did not include this proposed measure in any of the citations before us, and the Postal Service did not address it in its post-hearing briefs (nor does it on review). Likewise, the judge did not address this measure at all in the San Antonio, Benton, and Martinsburg decisions and in the Houston decision, she expressly declined to address the measure because the citation did not list it. On review, the Secretary does not address the judge’s rejection of this measure due to its absence from the citations. At the same time, the Postal Service does not argue that the measure should not be considered on that (or any other) ground.

Putting aside whether the judge correctly declined to consider this measure given its absence from the citations at issue, we find that the Secretary has failed to adequately explain how “analyzing data” would have enabled the Postal Service to materially reduce the hazard or pointed to evidence that it would have in fact done so. The Secretary vaguely asserted that the information the Postal Service could acquire from such an analysis could be used to create an effective heat stress program, but he provided no details or examples. *See Beverly Enters.*, 19 BNA OSHC at 1191 (requiring the Secretary to “specify the particular steps a cited employer should have taken” to address cited hazard); *Nat’l Realty*, 489 F.2d at 1268 (same). In the transcript pages the Secretary cited in support of this measure, Tustin stated that data analysis would allow the Postal Service to “figure out the environmental conditions [that] are associated with heat-related illness in [its] workforce.” But he did not say what the Postal Service could do with that information to materially reduce the hazard, other than that the data could be used to “start developing plans.”

Tustin did create a chart from the Postal Service’s data to show that the number of heat-related incidents rose as the temperature rose, but he never identified any specific actions that the Postal Service could take based on the chart or discuss the feasibility and efficacy of any such measures.⁴⁰ For these reasons, we find that the Secretary has not shown that the Postal Service can materially reduce the excessive heat hazard by analyzing its heat-related illness data.

Air-Conditioned Vehicles

In every case except San Antonio, the Secretary argued that the Postal Service could have abated the hazard by replacing its fleet of non-air-conditioned “Long-Life Vehicles” (LLVs) (the “familiar boxy mail truck[s]”) with air-conditioned vehicles.⁴¹ On review, the Secretary states only that the LLVs many carriers drive can become very hot inside. Below, the Secretary argued that the use of air-conditioned vehicles would materially reduce the hazard by providing carriers with a cool location to take rest breaks, as well as a cool place to go if they are experiencing symptoms of a heat-related illness. The Secretary maintained that the economic and technical feasibility of this measure is demonstrated by the fact that the Postal Service is already planning to replace all of its LLVs with air-conditioned vehicles, and began taking steps to do so in 2014. He also noted that Bernard said he believed using air-conditioned vehicles is technically feasible.

The Postal Service does not specifically address this abatement proposal on review, but below it argued that carriers already have access to air-conditioned or shaded locations where they can rest. In the Martinsburg case, for example, it pointed out that the carrier involved in the citation incident testified that she took a fifteen-minute rest break in an air-conditioned 7-Eleven that day, and said she could go there or to several other air-conditioned businesses at any time. The judge did not discuss the Secretary’s proposed measure in the Benton and Martinsburg decisions. In the

⁴⁰ In *Pepperidge Farm*, the Commission held that the Secretary may propose that an employer engage in a “process” to determine whether particular actions will abate a hazard. 17 BNA OSHC 1993, 2034 (No. 89-265, 1997). But it made clear that the Secretary still must at least show that the underlying actions that are the subject of such a process have “some . . . efficacy”: “We prefer the term ‘process’ . . . because experimentation may be read to imply the application of abatement methods the efficacy of which have not been established [W]e would not require employers to adopt abatement methods without some showing of their efficacy.” *Id.* at 2033 n.112. In any event, the Secretary did not allege that the Postal Service should have analyzed its data in order to engage in a “process” to find the best abatement approach.

⁴¹ Both San Antonio carriers had air-conditioned vans, as did the Houston carrier. The other carriers involved in the citation incidents all drove LLVs without air-conditioning.

Houston decision, she stated only that she would not address it because it was not included in that citation.

We note that this proposed measure appears only in the Martinsburg citation. But again, putting aside whether that omission is of any consequence here, we find that the Secretary has failed to show it would have been feasible for the Postal Service to have made air-conditioned vehicles available to all carriers prior to the summer of 2016. *See Nat'l Realty*, 489 F.2d at 1266 (“[T]he Secretary must be constrained to specify the particular steps a cited employer should have taken to avoid citation”); *Cormier Well Serv.*, 4 BNA OSHC 1085, 1086 (No. 8123, 1976) (“[The Secretary] must . . . show the existence of feasible steps the employer could have taken to abate the hazard and, therefore, avoid citation.”). The Postal Service began taking steps to replace its aging fleet in 2014, and when the National Hearing took place in early 2019, was in the process of testing and evaluating prototypes created by different potential suppliers. Han Dinh, the Postal Service’s manager for vehicle engineering, projected that the actual production of new vehicles would not begin until at least December 2021.

At no point has the Secretary explained why he believes it would have been feasible for the Postal Service to have completed this project before the citations were issued. As for Bernard’s testimony, he merely opined that using air-conditioned vehicles is “technically feasible,” but agreed that he “didn’t say it was economically feasible.” He was not asked to (nor did he) provide an opinion on whether it would have been feasible for the Postal Service to have made such vehicles available to all carriers by 2016. As a result, we find that the Secretary has not proven the feasibility of this proposed measure.

Training

Although the Secretary does not dispute that the Postal Service provided heat safety training to employees at the stations at issue, he argued in only the Houston and Martinsburg cases that the excessive heat hazard could be materially reduced if the Postal Service provided better training to the employees in those stations. On review, the Secretary fails to identify what the Postal Service could have done to improve its training in either of those cases, citing only Bernard’s testimony that “there seemed to be a disconnect between what was included in the [training] materials and what was actually being absorbed by [employees].” Below, the Secretary critiqued the training for being “focused primarily on hydration.” In the Houston case, the Secretary also vaguely asserted that the Postal Service could have included “a wider variety of

topics, different methods for conveying said topics, and follow-up from upper management to ensure” that the training was provided and “absorbed by both supervisors and carriers.” In that case, he also alleged that two Houston carriers had received no heat safety training in the six months prior to the date of the citation incident. And in the Martinsburg case, the Secretary suggested that a computer-based heat safety training the Postal Service provided employees could have been made mandatory.

The Postal Service contends that it adequately trains employees on heat safety through several means. It cites testimony from Manuel Peralta, the NALC’s national director of safety and health, who agreed that the Postal Service trains its employees, including management, on heat safety in a variety of ways, including stand-up talks, “Learning Management Systems” (computer-based) courses, posters, videos, bulletins, messages on computer screen savers, laminated cards listing the signs and symptoms of heat-related illnesses, stickers placed in vehicles with the same information, and mobile delivery device texts regarding heat safety. As for Bernard’s testimony, the Postal Service points out that he characterized its “Southern Area Heat Stress Campaign,” a compilation of heat safety information the Postal Service distributed in April 2016 to all post offices in the “Southern Area,”⁴² as “adequate” and “a good program” that “clearly a lot of effort had been put into.” Finally, the Postal Service argues that the Secretary failed to specify what additional training methods it should have used.

In both cases, the judge agreed that the Secretary failed to show the Postal Service provided inadequate heat safety training, noting that the Secretary failed to articulate what additional training methods the Postal Service should have used. In the Houston case, the judge pointed out that carriers at the Astrodome Station (where the carrier at issue worked) were given heat safety talks in both early May and late June 2016 as part of the Southern Campaign and that these talks covered the symptoms of heat-related illnesses, precautions to take, and instructions to call 911 when experiencing symptoms. In the Martinsburg case, the judge similarly found that carriers had been trained on the recognition, prevention, treatment, and reporting of heat-related illnesses.

⁴² The “Southern Area” is one of seven areas in which the Postal Service divides its operations. Houston is in the Southern Area, though Martinsburg is not. The Southern Area consists of Arkansas, Texas, Louisiana, Oklahoma, Mississippi, Florida, and a portion of Georgia. The other six areas are: Northeast Area, Eastern Area, Western Area, Pacific Area, Great Lakes, and Capital Metro.

We agree with the judge that the Secretary has failed to show that the Postal Service's heat safety training was inadequate in both cases. *USPS*, 21 BNA OSHC 1767, 1773-74 (No. 04-0316, 2006) (to establish abatement element, Secretary must prove "that the methods undertaken by the employer . . . were inadequate"). As she found, the Secretary identified no specific ways that the training provided at either station could have been improved. Regarding his claim of a misplaced emphasis on hydration, the Secretary relied on testimony from Bernard that "even though the training [provided as part of the Southern Campaign] was broad" in the information it covered, "what [the employees] seemed to recall was the message about drinking" When asked if too much emphasis was put on hydration, Bernard simply replied that the "training materials covered a lot of topics," and "while it was there on paper, the execution of that lent to . . . [when] you query people about what do they know to deal with heat stress they would report drink water." When asked if the training would have materially reduced the hazard if it "had, you know, a better focus to it," he replied, "I think so, yes."

Bernard made no attempt to explain what "a better focus" would entail. In fact, as the Postal Service points out, Bernard praised the Southern Campaign.⁴³ Moreover, his vague criticisms focused on the results of the training in terms of what employees recalled rather than identifying any specific improvements the Postal Service should have made. Indeed, Bernard did not say that the training was too focused on hydration; he merely said that hydration was what

⁴³ As Bernard acknowledged, the record shows that the Postal Service provided an "extensive" amount of heat safety training at the Astrodome Station as part of its Southern Campaign. On April 26, 2016, the Southern Area safety manager informed all Southern Area Districts about the "Heat Stress Campaign" in a letter and required them to certify that all employees had viewed a video on heat safety by May 13, to certify that supervisors also completed a "Heat Stress Prevention Program training for Supervisors and Managers," and to provide safety talks on heat stress "throughout the summer months" that are tracked. The Astrodome Station "safety captain" testified that he was responsible for conducting many of the station's safety talks and over his five years with the station, had given typically twenty or thirty each summer, with the main topic covered being heat safety. In addition to these talks, he said that all carriers were required to watch a video about heat safety, and that he had posted some heat-related safety information on a bulletin board. Screen savers on monitors located where carriers sort mail also display heat-related safety messages. An Astrodome Station supervisor testified that he had worked at Houston stations since 1984 and that employees were always given heat safety talks every summer. And a safety specialist for stations in the Houston area (including the Astrodome Station) testified that he provides an orientation for all new hires that includes training on heat safety.

employees seemed to best remember. In short, he did not clearly identify any specific inadequacies in the training given or explain what the Postal Service should have been doing that it was not.

As for the Secretary's allegation that two Houston carriers did not receive heat safety training in the six months prior to the June 17, 2016 citation incident, the record does not support that claim. The only evidence the Secretary cited is the sign-in sheets for heat safety training sessions given on various dates during the summer of 2016, several of which show that the two carriers were in fact present at those sessions. The earliest sign-in sheet is dated a week after the June 17 incident, but the Secretary does not claim that was the first training session provided that year, or point to any evidence that it was.⁴⁴ In fact, other documents provided by the Postal Service show that at least two other heat safety training sessions were given in late May and early June. There is nothing in the record to establish that the two carriers were not trained on these dates.

Finally, regarding the Secretary's claim that the training provided in Martinsburg was inadequate because the Postal Service's computer-based training was not mandatory—the only other specific deficiency he alleged—he presented no evidence that this training would have materially reduced the hazard and, in fact, acknowledged that employees in Martinsburg were being trained on heat safety in several ways, including through stand-up talks given in the mornings before carriers start their routes. The Secretary also does not explain why mandating this particular training would have materially improved upon any other type of training.

In sum, the Secretary has not met his burden to identify specific measures that the Postal Service could have feasibly taken that would have materially and effectively reduced the excessive heat hazard that existed in these cases. Accordingly, we vacate all four citations.
SO ORDERED.

/s/

Cynthia L. Attwood
Chairman

/s/

Amanda Wood Laihow
Commissioner

Dated: February 17, 2023

⁴⁴ The sign-in sheets show that carriers at the Astrodome station were given the following heat safety trainings in the summer of 2016: "Heat Stress Symptoms" (June 24), "Tips for Working In the Heat" (July 5), "Heat Stress and Hydration" (July 6), "Stay Healthy in the Heat" (July 9), "Heat Related Illnesses" (July 11), "Heat Stress – Do's and Don'ts" (August 4), "Beat the Heat" (August 9), and "Heat Related Illness and Medication" (September 20).