COMMENTS OF THE INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS ON THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION'S ADVANCE NOTICE OF PROPOSED RULEMAKING FOR HEAT INJURY AND ILLNESS PREVENTION AT WORK

Docket No. OSHA-2021-0009
RIN 1218-AD39

The International Brotherhood of Electrical Workers, AFL-CIO, CLC ("IBEW") welcomes the opportunity to comment on the Occupational Safety and Health Administration's ("OSHA") advance notice of proposed rulemaking on heat injury and illness prevention in outdoor and indoor work settings, 86 Fed. Reg. 59309 (Oct. 27, 2021)("ANPRM").

The IBEW is a labor organization that represents approximately 750,000 active members and retirees who work in a wide variety of fields such as utilities, telecommunications, manufacturing, broadcasting, and construction, including residential construction. Nearly 400,000 of the IBEW's members are employed in the construction industry. Accordingly, the IBEW has a unique interest in the agency's efforts to develop a robust federal heat standard for outdoor and indoor work settings.

The IBEW conducted an informal survey of various of its local unions to determine the extent and nature of hazardous heat at members' jobsites and the nature and effectiveness of programs currently used by employers to prevent heat illness. The IBEW received over responses 100 responses from various locals across the country. Half of the responses came from "outside" locals that represent electrical linemen whose work is primarily performed outdoors. Linemen are, among other things, responsible for building, installing and maintaining the power lines and components that carry power from the generating source or power plant to the homes and businesses where it is used. Linemen may also perform all classes of outdoor underground transmission and distribution line work.

Of the outside locals that completed the survey, approximately 83 percent reported that heat is a problem on the job site. Respondents indicated that, of those employers who currently have heat measures in place, such measures most often consist of education and awareness efforts, hydration, and cool down periods. When asked what measures should be added to employer programs, the most popular response was cooling methods and mandatory rest periods. Respondents suggested a wide variety of cooling methods, e.g., air conditioning in trucks or trailers, misting fans, tents.

The other half of the survey responses came from the IBEW's "inside" locals that represent electricians responsible for all aspects of electrical work in commercial, industrial, and residential construction. Often times, electricians on new construction projects must perform their work in unconditioned building envelopes. IBEW inside locals also represent workers in the utilities, telecommunications, broadcasting, and manufacturing sector.

Approximately 63 percent of inside locals that completed the survey reported that heat is a problem on the job. Respondents indicated that, of those employers who currently have heat measures in place, such measures most often consist of education and awareness efforts, hydration, and air conditioning. When asked what measures should be added to employer programs, responses included mandatory breaks depending on weather and working conditions, the provision of cooling rooms, proper ventilation and air circulation, proper training on prevention, and consistent enforcement.

Based on the above-referenced survey and decades of experience training and representing workers in a range of industries, the IBEW recommends that OSHA mandate that all employers – regardless of size – develop and implement a heat illness prevention plan ("Plan") for their respective workplaces. The contents of such plans are detailed below.

Heat Illness Prevention Plan for Outdoor Work Settings

According to a study by researchers of the Center for Construction Research and Training, construction workers who perform work outdoors have a disproportionate risk of heat-related death.[1] Although construction workers compose 6 percent of the total U.S. workforce, they accounted for 36 percent of all occupational heat-related deaths from 1992 to 2016. From 2011 to 2016, over 80 U.S. construction workers suffered heat-related deaths. Most of those deaths occurred during the warmest months of the year and in the afternoon between 2 p.m. and 4 p.m. To mitigate employees' risk of heat-related illness, the CPWR report recommends workplace interventions such as enhanced surveillance, ready access to water, rest breaks and acclimatization. Such measures are consistent with the survey responses the IBEW received from outside locals.

With respect to outside electrical work, OSHA should require employers to develop and implement a Plan that sets forth information and procedures on how to identify, prevent, and respond to heat-related illness. The Plan must be in writing and communicated to employees. The Plan must be in English and the language understood by the majority of the employees. The Plan must be available at the worksite.

OSHA should require the employer to, at the start of each project, train all employees on heat illness and injury and the company's Plan for preventing such hazards. OSHA should also require the employer to track and assess the worksite heat conditions before the start of each shift. Where the employer determines that the risk of heat-related illness is present, the employer must

[1] Xiuwen Sue Dong et al., *Heat-related deaths among construction workers in the United States*, American Journal of Industrial Medicine, July 2019.

hold a pre-shift meeting with its employees to discuss the Plan and its heat-illness prevention procedures. To determine whether the risk of heat-related illness is present, the employer must consider the following conditions:

- The ambient temperature.
- Whether work is performed under direct sunlight.
- The use of personal protective equipment (PPE) that may increase the body's heat burden.
- The degree of physical exertion necessary to carry out the work.
- The length of the work shift.
- Any other condition found on the work site that is likely to contribute to heat illness.

Where the above-referenced factors indicate that the risk of heat-related illness is present during a work shift, the Plan must, ***at minimum***, require (1) routine workforce monitoring, and (2) periodic shade and hydration.

With respect to monitoring, the employer must implement a buddy system whereby an individual worker monitors the condition of another co-worker for signs of heat illness and vice versa. The Plan must include a list of signs and symptoms of heat-related illness that supervisors, foremen and employees must watch for (e.g., headache, dizziness, lightheadedness, fainting, weakness, mood change, mental confusion, upset stomach or vomiting). Supervisors and/or foremen must also conduct periodic check-ins with the work crew throughout the shift and closely observe those workers who have been newly assigned to a high heat area or work site. Supervisors and foremen must continuously monitor whether the degree of risk has increased, thus, triggering additional preventative measures.

With respect to shade, the employer must make available an area or structure that effectively blocks direct sunlight. One indicator that blockage is sufficient is when objects do not

cast a shadow in the area of blocked sunlight. Shade is not adequate when heat in the area of shade defeats the purpose of shade, which is to allow the body to cool. For example, a trailer sitting in the sun does not provide acceptable shade to a person inside it, unless it includes air conditioning. Shade may be provided by any natural or artificial means and must be located as close as practical to the work site.

With respect to water, the employer must provide sufficient drinking water so that at least one quart per employee per hour is available throughout the entire work shift. This standard is consistent with three of the four state heat standards currently in place: California, 8 CCR § 3395(c); Oregon, OAR 437-002-0155(4)(c); and Washington, WAC 296-62-09540(1). The water shall be located as close as practicable to the areas where employees are working.

With respect to shade and hydration, employers must ensure that employees have ample opportunity to drink water and avail themselves of shade. The length and frequency of cool-down periods shall be appropriate for the degree of heat illness risk present during the work shift.

When the risk of heat-related illness is high at a work site, OSHA should require that the Plan provide for additional preventive measures. To determine whether the risk of heat illness is high, the employer must consider the severity of the work site conditions set forth above (e.g., whether the temperature equals or exceeds 95 degrees Fahrenheit, air quality, etc.). The Plan must describe the additional preventative measures the employer will implement at high-risk work sites. The additional measures must be appropriate for the degree of risk and may include any combination of the following: air-conditioned environments (e.g., trailers, portable AC units), cooling fans, misting machines, arm immersion cooling systems, cooling hats, cooling vests and other cooling garments. For high-risk work sites, the minimum heat illness prevention measures must include a paid ten-minute cool down rest period in the shade for every two hours of work.

Finally, each employer Plan for outdoor work settings must include an acclimatization procedure. At minimum, such procedure must require supervisors and/or foremen to closely observe new employees and those who have been newly assigned to a high heat area or work site. Such employees will be subject to a two-week break-in period in which they will perform the most physically demanding activities during the cooler parts of the day (e.g., morning) and be assigned less physically demanding work during the hotter parts of the day.

Heat Illness Prevention Plan for Indoor Work Settings

With respect to indoor work settings, OSHA should also require employers to develop and implement a Plan that sets forth information and procedures on how to identify, prevent, and respond to heat-related illness. The Plan must be in writing and regularly communicated to employees. The Plan must be written in English and the language understood by the majority of the employees and must be available at the worksite.

OSHA should require the employer to conduct annual trainings on heat illness and injury and the company's Plan for preventing such hazards. OSHA should also require the employer to track and assess the worksite heat conditions before the start of each shift. Where the employer determines that the risk of heat-related illness is present, the employer must hold a pre-shift meeting with employees to discuss the Plan and its heat-illness prevention procedures. To determine whether the risk of heat-related illness is present, the employer must consider the following conditions:

- The ambient temperature.
- Whether the worksite is air conditioned.
- Whether any portion of work is performed under direct sunlight.
- The use of personal protective equipment (PPE) that may increase the body's heat burden.

- The degree of physical exertion necessary to carry out the work.
- The length of the work shift.
- Any other condition found at the workplace that is likely to contribute to heat illness.

Where the above-referenced factors indicate that the risk of heat-related illness is present during a work shift, the Plan must, ***at minimum***, require (1) routine workforce monitoring, and (2) hydration.

With respect to monitoring, the employer must implement a buddy system whereby an individual worker monitors the condition of another co-worker for signs of heat illness and vice versa. The Plan must include a list of signs and symptoms of heat-related illness that supervisors and employees must watch for (e.g., headache, dizziness, lightheadedness, fainting, weakness, mood change, mental confusion, upset stomach or vomiting). Supervisors must also conduct periodic check-ins with the work crew throughout the shift and closely observe those workers who have been newly assigned to a high heat area or work site. Supervisors must continuously monitor whether the degree of risk at the workplace has increased, thus, triggering additional preventative measures.

With respect to water, the employer must provide sufficient drinking water so that at least one quart per employee per hour is available throughout the entire work shift. The water shall be located as close as practicable to the areas where employees are working. Employers must ensure that employees have ample opportunity to drink water. The length and frequency of cool-down periods shall be appropriate for the degree of heat illness risk present during the work shift.

When the risk of heat-related illness is high at a work site, the Plan shall provide for additional preventive measures. To determine whether the risk of heat illness is high, the employer must consider the severity of the work site conditions set forth above (e.g., whether the temperature

outside equals or exceeds 95 degrees Fahrenheit and the facility in which individuals are working is unconditioned). The Plan must describe the additional preventative measures the employer will implement at high-risk work sites. The additional measures must be appropriate for the degree of risk and may include any combination of the following: air-conditioned environments (e.g., trailers, rooms with portable AC units), cooling fans, cooling hats or bands, cooling vests and other garments. For high-risk work sites, the minimum heat illness prevention steps must include a paid ten-minute cool down rest period for every two hours of work.

Protecting Employees From Retaliation

As OSHA has found in other contexts, employees are hesitant to report work-related illnesses and injuries when they fear retaliation. *See, e.g.,* OSHA, U.S. DOL, *Improve Tracking of Workplace Injuries and Illnesses; Final Rule*, 81 Fed. Reg. 29624, 29672 (May 12, 2016) (linking testimony about employees disciplined for reporting workplace injuries to the need for antiretaliation protection in the recordkeeping rule). Ensuring that employees can safely report heat-related symptoms is particularly important in this context, when the success of any heat stress plan will depend on employees' willingness to monitor themselves and one another and to report early signs of distress to their employers. Such reporting will inevitably involve pausing work to enable employees to rest, rehydrate and cool down. In fact, survey respondents from both inside and outside locals cited the need for protection against discipline as a necessary component of any successful program.

We therefore urge OSHA to include an antiretaliation provision in its heat stress standard, modeled after 29 C.F.R § 1904.35. Such a provision should require employers to (1) establish and encourage workers to use reasonable procedures for reporting heat-related symptoms; and (2)

inform employees that the employer will neither discharge nor discriminate against them for reporting either their own or other employees' heat-related symptoms.

OSHA should also make clear that these regulatory requirements do not preclude employees from filing complaints under Section 11(c), 29 U.S.C.§ 660(c). The Plan's anti-retaliation policy should include information on how to file complaints with the agency concerning heat hazards at the workplace and complaints concerning retaliation, with contact information (name, address, telephone number, and e-mail address) for the appropriate OSHA representative with authority to receive, process and make disposition of such complaints.

OSHA should also clarify in its heat standard that it will, in fact, accept and respond to third-party complaints about hazardous heat exposures on work sites. Third-party complaints are critical in high-risk workplaces where undocumented and migrant workers have a significant presence. Such workers are especially reluctant to complain about unsafe conditions or injuries at work out of fear that the employer will report them to the immigration authorities resulting in deportation. OSHA should therefore clarify that third-party complaints may be filed by labor organizations and other workers' rights groups.

Conclusion

The IBEW commends OSHA for its continued efforts to ensure that, at the end of the workday, all workers are safe and able to head home to their families and loved ones. The IBEW looks forward to working with OSHA on the development of a robust and comprehensive heat standard that, among other things, requires all employers to develop and implement a heat illness prevention plan that accounts for the unique conditions of their respective industries and work sites.