



Wiring a green tomorrow



Joint Safety Committee
Oregon Pacific-Cascade Chapter, NECA
IBEW Local 659
Thursday July 2nd , 2024
Meeting MINUTES

Roll call: meeting called to order in person
Approval of previous Meeting Minutes

Communications

We discussed how May safety week went. I will get better at scheduling. It appears that some were not informed of the walks. In addition, we reviewed Heat stress and the few ways to satisfy the standard and Wildfire smoke.

https://youtube.com/watch?v=cP_LBHQ9Svs&si=uQ-BY9xocLJGswB6

Please see NECA web portal for downloads

OSHA Injury/Incidents (July-December)

Recordable

- 1.1 Back Injury lifting customer's 200lb AV 1.23
- 1.2 Finger poke screw through gloves 2.13
- 1.3 Wrist/arm rotating light pole 2-16
- 1.4 Foreign substance in eye unknown 2.21
- 1.5 Hand injury, laceration, using porta band 3.12
- 1.6 Metal door dropped on worker foot Electro magnet 3.29
- 1.7 Drill into finger missed screw 4.15
- 1.8 Taking out ceiling fan using ladder 4.25
- 1.9 Lifting 50lbs resulting in hernia 5.15
- 1.10 Cut to finger while trimmer breaker resulting in stiches 5.20

First Aid/Near-miss

- 1.11 Worker fell on a pipe when ladder slipped 1.10
- 1.12 Cut finger with porta band 1.31
- 1.13 Electric shock to hand 4.08

Class Schedule- Posted online

Next Meeting – July 23rd , 2024

Adjournment

July 2nd , 2024

Vaughn Pugh
Integrity Safety-Consultant



Wiring a green tomorrow



Joint Safety Committee
Oregon Pacific-Cascade Chapter, NECA
IBEW Local 659
Tuesday July 23rd , 2024
Meeting AGENDA

Roll call: meeting called to order, In-Person and Zoom
Approval of previous Meeting Minutes

1.0 Communications

- 1.1 Please check out NECA website for supplementary materials
- 1.2 How we doing on any needs you might have that I can help?

2.0 New Business- (safety packets distributed)

- 2.1 Definition and use of SRL's
- 2.2 Selected items from Safety Packet
- 2.3 Other items

3.0 OSHA Injury/Incidents (January-June)

Recordable

- 3.1
- 3.2

First Aid/Near-miss

- 3.3
- 3.4

4.0 Class Schedule- Posted online

All NECA Contractors are reminded that work related accidents and incidents should be reported via the Accident/ Incident report to the NECA office for consideration by the committee. If you need a copy of the report, contact the Chapter office.

***IMPORTANT REMINDER:** The variance granted to NECA/IBEW by OR-OSHA requires participation by both Labor and Management Representatives at the Joint Innovative Safety Committee. For the Committee to be viable and provide assistance to Contractors and IBEW Members we need to have consistent attendance of all committee members.*

Next Meeting: August 27th, 2024



POWERFUL TRADITION ELECTRIFYING FUTURE
OREGON PACIFIC-CASCADE CHAPTER

Safety Meeting Packet

July 2024

1040 Gateway Loop, Suite A ♦ Springfield, OR 97477

541-736-1443 Office ♦ 541-736-1449 Fax

**2024 LABOR HOURS RECAP
ALL SIGNATORY CONTRACTORS**

Local#	Contract Type	Annual Total	Average Hrs/Mo	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
280	Inside	463,478	5	92,696	74,012	101,934	100,773	87,884	98,875						
280	Inside Appr.	126,294	5	25,259	18,960	26,703	29,014	24,119	27,498						
280	MAI	0	0	#DIV/0!	0	0	0	0							
280	Material	29,987	5	5,997	5,609	6,660	6,323	5,321	6,074						
280	Residential	46,963	5	9,393	6,746	12,107	9,655	8,335	10,120						
280	Resi. Appr.	23,612	5	4,722	3,512	5,006	5,602	4,412	5,080						
280	S & C	83,945	5	16,789	13,307	17,510	18,882	16,439	17,807						
280	S & C Appr.	24,401	5	4,880	3,633	4,927	5,131	4,877	5,833						
280	Support Tech/MOU	30,346	5	6,069	5,417	7,965	8,376	5,621	2,967						
	TOTAL 280	829,026	5	165,805	131,196	182,812	183,756	157,008	174,254	0	0	0	0	0	0
	Total NECA	732,835	5	146,567	114,608	160,181	163,168	138,068	156,810	0	0	0	0	0	0
	% NECA	88.40%	5		87.36%	87.62%	88.80%	87.94%	89.99%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Local#	Contract Type	Annual Total	Average Hrs/Mo	Jan	Feb	March	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
659	Inside	94,654	5	18,931	14,003	19,007	21,836	18,414	21,394						
659	Inside Appr.	36,820	5	7,364	5,743	6,772	8,892	7,354	8,059						
659	Material	2,321	5	464	300	378	565	493	585						
659	Residential	1,799	5	360	381	392	57	453	516						
659	Resi. Appr.	1,709	5	342	366	332	391	318	302						
659	S & C	4,427	5	885	584	861	958	998	1,026						
659	S & C Appr.	7	1	7	0	0	0	7							
	Total 659	141,737	5	28,347	21,377	27,742	32,699	28,030	31,889	0	0	0	0	0	0
	Total NECA	107,841	5	21,568	15,350	20,963	25,542	21,036	24,950	0	0	0	0	0	0
	% NECA	76%	5		72%	76%	78%	75%	78%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Local#	Contract Type	Annual Total	Average Hrs/Mo	Jan	Feb	March	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
932	Inside	57,277	5	11,455	10,071	11,612	12,194	11,305	12,095						
932	Inside Appr.	22,221	5	4,444	3,824	4,504	5,168	4,253	4,472						
932	Residential	1,037	4	259	0	327	145	392	173						
932	Resi. Appr.	2,964	5	593	378	545	580	699	762						
932	S & C	4,059	5	812	455	975	985	800	844						
932	S & C Appr.	1,002	4	251	0	184	397	235	186						
	Total 932	88,560	5	17,712	14,728	18,147	19,469	17,684	18,532	0	0	0	0	0	0
	Total NECA	70,344	5	14,069	11,471	13,943	16,524	13,713	14,693	0	0	0	0	0	0
	% NECA	79%	5		78%	77%	85%	78%	79%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Grand Total	1,059,323	5	211,865	167,301	228,701	235,924	202,722	224,675	0	0	0	0	0	0
	Total NECA	911,020	5	182,204	141,429	195,087	205,234	172,817	196,453	0	0	0	0	0	0
	% NECA	86%	5		85%	85%	87%	85%	87%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

2024 LABOR HOURS RECAP NECA MEMBERS

Local#	Contract Type	Annual Total		Average Hrs/Mo	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
280	Inside	408,621	5	81,724	64,139	91,106	89,245	76,790	87,341							
280	Inside Appr.	110,143	5	22,029	15,966	23,445	25,431	20,953	24,348							
280	MAI	0	0	#DIV/0!	0	0	0	0	0							
280	Material	26,884	5	5,377	5,160	6,095	5,686	4,578	5,365							
280	Residential	28,557	5	5,711	3,854	5,927	6,615	5,602	6,559							
280	Resi. Appr.	18,937	5	3,787	2,462	4,171	4,728	3,450	4,126							
280	S & C	85,250	5	17,050	13,048	17,217	18,487	16,209	20,289							
280	S & C Appr.	25,513	5	5,103	4,932	4,871	5,030	4,865	5,815							
280	Support Tech/MOU	28,930	5	5,786	5,047	7,349	7,946	5,621	2,967							
Total 280		732,835	5	146,567	114,608	160,181	163,168	138,068	156,810	0	0	0	0	0	0	0

Local#	Contract Type	Annual Total		Average Hrs/Mo	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
659	Inside	72,934	5	14,587	10,417	14,765	17,052	13,696	17,004							
659	Inside Appr.	27,133	5	5,427	3,956	4,798	6,718	5,576	6,085							
659	Material	1,450	5	290	112	208	407	315	408							
659	Residential	1,315	5	263	181	219	309	301	305							
659	Resi. Appr.	575	5	115	100	112	98	150	115							
659	S & C	4,427	5	885	584	861	958	998	1,026							
659	S & C Appr.	7	1	7	0	0	0	0	7							
Total 659		107,841	5	21,568	15,350	20,963	25,542	21,036	24,950	0	0	0	0	0	0	0

Local#	Contract Type	Annual Total		Average Hrs/Mo	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
932	Inside	46,001	5	9,200	7,733	9,157	10,537	8,931	9,643							
932	Inside Appr.	18,510	5	3,702	3,173	3,714	4,392	3,547	3,684							
932	Residential	40	1	40	0	0	0	40	0							
932	Resi. Appr.	979	5	196	110	160	213	160	336							
932	S & C	3,780	5	756	455	696	985	800	844							
932	S & C Appr.	1,034	4	259	0	216	397	235	186							
Total 932		70,344	5	14,069	11,471	13,943	16,524	13,713	14,693	0	0	0	0	0	0	0

Grand Total		911,020	5	182,204	141,429	195,087	205,234	172,817	196,453	0	0	0	0	0	0	0
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Safety Training Topics

August 2024

Commercial Vehicles

Traffic Control

Hardhats

Respirator Use and Testing

Working Hot

SAFETY TRAINING TOPIC

Commercial Vehicles

WHAT IS A COMMERCIAL VEHICLE?

A Commercial Motor Vehicle is any self-propelled or towed vehicle used on highways in intrastate or interstate commerce to transport passengers or property:

- If it has a gross vehicle weight rating of 26,001 or more pounds; or
- If it is designed to transport more than 16 passengers, including the driver; or
- If it is used to transport hazardous materials (as defined in 49 U.S.C. App. 1801 et seq.) in quantity requiring placarding under federal regulation.

Simple definition:

In essence, it's usually a big truck that may pull a freight trailer.

However, the company and its insurance agency may consider any company vehicle a commercial vehicle.

THE COMMERCIAL MOTOR VEHICLE SAFETY ACT (CMVSA)

This Act requires all states to meet the same minimum standards for testing and licensing drivers of commercial motor vehicles. The act also mandates uniform penalties and a central reporting system. Violations of the CMVSA are serious.

THE LAWS

The laws surrounding commercial vehicles boil down to one thing: Don't drive a commercial vehicle unless you have a current Commercial Driver's License (CDL) with authorization for that vehicle. Period.

DON'T MOVE THE TRUCK

If a truck is delivering the switchgear you need but is on the wrong side of the building, don't "do the driver a favor" and drive it to the correct side.

If a truck is blocking your way and you can't find the driver, don't hop in the truck and try to move it. Call security and have them find the driver. Do not attempt to open the trailer. The truck may be legit, or it may be part of a terrorist act. Stay clear of it.

TAKING DELIVERY

You may need to be on hand to load or unload electrical equipment, especially if you are on a rush job. In that case, you may be interacting with the driver.

Commercial vehicles are hard to drive, which is one reason for the stringent licensing. Cut the driver some slack.

Offer to help the driver back up, especially if the driver is trying to maneuver a 28-foot trailer into a tight space.

Do not stand directly behind the vehicle. If assisting the driver, stand off to the side and follow directions on where the driver wants you positioned.

Stay clear of the vehicle while it is moving.

The driver may be distracted or tired, so diplomatically double check safety items before loading or unloading. For example, ensure the wheels are blocked. The driver will know how to do this- you can help just by asking if it is done.

Rope off the delivery area if, for example, you need to uncrate panel board enclosures and inspect them before the driver leaves.

The driver is under tight time pressure, and despite the hyperbole to the contrary, these folks cut safety corners to "make time" they lost through delivery delays. So, help make the delivery go as smoothly as possible. For example, if you are taking delivery of a motor, have your insulation resistance tester ready.

Do not raise the trailer door or enter the trailer until the driver tells you it's OK to do so.

Do not operate a lift truck unless you have been formally qualified to use that particular truck. A delay from an accident will take far longer than a delay in finding a qualified operator. If you can't find a qualified operator, contact your foreman.

REVIEW AND DISCUSSION

- What is a commercial vehicle?
- How can you sum up the laws about commercial vehicles?
- When can you *move* a commercial vehicle?
- What should you do if you find a commercial vehicle unoccupied in a main traffic area of a plant or other job site?
- Is it OK to stand on the running board of a commercial vehicle, as long as you hang onto the door?
- If you are assisting the driver in backing into a tight space, where should you stand?
- What should you double-check, before loading or unloading takes place? What are some safety items to run through, in that process?
- When should you stay clear of the commercial vehicle?
- How can you help a driver get through the delivery or pickup in a timely manner, and why is that important?
- If you can't find a qualified lift truck operator, how do you get that new switchgear off the truck so you can get it set in place and go home?

SAFETY TRAINING TOPIC

Traffic Control

WHY THIS IS IMPORTANT TO YOU

Several hundred people die each year in traffic-related deaths in construction zones. The trend is rising because of changing demographics, increasing driver distractions (such as cell phones), and increasing work in traffic areas.

Both above grade and subsurface work on and around roadways will become more common with the replacement of crumbling infrastructure and the need for increased capacity, or with new innovations such as high-tech traffic control systems. You are likely to work on one of these projects, if you have not already done so.

Governments have responded to the increased dangers with "Give 'em a brake" signs, construction zone fine multipliers, and severe penalties for violating certain motorist rules in construction zones. This is a problem that gets attention. Unfortunately, none of the corrective actions have eliminated the dangers.

WHAT YOU NEED TO DO

Understand the general goal of traffic control plans to route traffic through work zones as closely as possible to normal conditions using geometry and traffic control devices while minimizing danger to the working crews.

Understand the traffic control plan for your particular part of the project. Your foreman will communicate this plan to you, so ask questions as needed.

If you think you see a weakness in the plan, identify it to your foreman and ask for clarification or resolution. Not all plans are perfect. An example of a weakness is not allowing for sufficient room in the right place for the boom truck you need.

Understand the restrictions the traffic control plan places on you where you can walk, what kinds of gestures you can make, where you can place tools, and so on.

Wear the proper PPE for the conditions. In some cases, this would mean wearing an orange vest or similar item that makes you stand out against the background.

When entering or exiting a pit or manhole-but especially when exiting-look first for vehicles that have run the barricades or are driving on the shoulder or other areas where traffic is not supposed to be. This happens often enough that it is a concern.

On a large or long-lasting project, you'll typically have traffic control attendants. It is very unlikely an electrician will be directing traffic. However, things happen; people get injured, don't show up, etc., or a particular operation may require extra people to control traffic for a few minutes. You may be asked to help control traffic. In such a case, keep in mind that your goal is to communicate with motorists and with the other traffic controllers if there are any. Make eye contact and use clear hand signals. Allow time for people to respond.

IF YOU ARE A SMALL CREW

On a small or short-lived project, you probably won't have a traffic control attendant. Linemen work under such conditions all the time. In such cases, you must use traffic control devices to alert motorists to drive around your vehicle or work area. These devices would be unattended while you and others do the work.

Park your truck in such a way as to minimize the likelihood of being struck by regular traffic motorists.

Take care to direct traffic with hand signals so you can clear a path to safely set up the traffic control devices. It does no good to get hit by a car while setting these up.

When choosing placement locations for the traffic control devices, allow time for people to respond. Placing one device 10 feet in front of a truck doesn't do much good. Placing a series of devices between the flow of traffic and your truck gives drivers the time they need to change lanes.

To increase your assurance that the traffic control devices will protect you while you are working, pause after placing them. Watch how motorists approach these devices. If the motorists adjust to these devices smoothly, you have placed them well. If the motorists are making sudden stops or appear confused, reassess placement and make the necessary corrections. If this doesn't fix the problem, you may need to contact your foreman about getting a traffic control attendant or possibly rescheduling the work for a safer time.

If you can see your traffic control devices from the work area, look at them or the traffic occasionally to ensure they are still working. Whether you can see them or not, check your traffic control devices with each trip back to the truck. They may have been struck, moved by wind, or in some other way rendered ineffective.

REVIEW AND DISCUSSION

- Why is this topic important?
- What is the general goal of traffic control plans?
- What should you do if you don't understand the traffic control plan for your particular part of a project?
- What should you do if you think you see a weakness in the traffic control plan?
- Do traffic control plans place restrictions on you? What might some of these be?
- What might be appropriate PPE if you are working in a manhole on a city street?
- What should you do when entering or exiting a pit or manhole, and why?
- How should you park your truck if you are working on or near a roadway?
- What are some things to remember about traffic control device placement?
- When should you check your traffic control devices?

SAFETY TRAINING TOPIC

Hardhats

WHEN TO WEAR

Wear your hardhat any time you are on the job site, other than in an office or trailer.

TYPES AND CLASSES

Type I hats reduce impact from a blow to the top of the head.

Type II hats reduce impact from a wider range of blows.

Class C hats provide no electric protection.

Class E hats provide protection from high voltage and are proof-tested to 20,000V.

Class G hats provide protection from low voltage and are proof-tested to 2,200V.

WHAT THE HARDHAT DOES FOR YOU

Your hardhat helps identify you, thus improving security for everyone.

It provides some protection from falling objects, arcs, and objects your head might strike in close quarters. Your hat protects you from impact only if you have not altered the suspension system by placing things (other than a cold weather liner) between the suspension and the shell. Ensure your suspension isn't so loose it wobbles and not so tight it pinches your skin.

It is mechanically protective to the extent you have maintained the shell integrity. This means you cannot drill holes into it or alter the shell in any way. The solvents in paint can weaken the hat. Crystal clear acrylic spray may be acceptable, but get approval from your safety director before use.

It is electrically protective to the extent you have maintained shell integrity plus insulating properties. The more you alter the surface of the hat, the less protection it provides. Ink, pencil marks, paint, and paper create conductive paths on the hat, so keep writing and stickers to a minimum.

It keeps you cool. Measurements taken in hot weather show that the temperature in a properly worn hardhat is often less than the temperature outside. That's due to a combination of airflow, evaporation, and shading.

WHAT YOU SHOULD DO FOR YOUR HARD HAT

Properly adjust the suspension system.

Leave the shell intact. Don't drill holes in it, and don't swath it in stickers or other decorations.

Store it in a clean place out of the path of concentrated sunlight. Your car's rear window is not such a place.

Wash it with warm soapy water, and rinse the soap off thoroughly, when the hat shows signs of dirt accumulation. Wash the sweatbands and cradles, too.

Replace the suspension system if it is worn or damaged. Replace the hat if it has dents, cracks, or signs of wear.

Replace the hat if it's been subjected to an impact. It might not have been damaged, but you don't know for sure.

DON'TS

Don't heat it or bend it, and don't modify the visor.

Don't use the area between your head and the shell as a storage bin.

Don't wear it backwards or sideways. The front brim is designed as eye and face protection.

DEMONSTRATION

Have a volunteer wear the sample hard hat, adjusted properly. Tap the hat with the hammer, but don't use much force. You can get the point across without causing a neck injury! Ask the crew members present if anyone wants to volunteer to do this trick without the hat. Note that the hat, having absorbed the impact, may be damaged and should be replaced.

REVIEW AND DISCUSSION

- When should you wear your hardhat?
- What is the type and class of the hardhat you are wearing? Is it correct for the kind of work you are doing?
- How does a hardhat protect you mechanically?
- How does a hardhat protect you electrically?
- What must you do to ensure the integrity of this electrical protection?
- Can a hardhat increase your hot weather comfort? Why?
- Why is the suspension system important, and what must you do to ensure it works for you?
- How should you store your hardhat?
- When should you replace your hardhat?
- What are some "don'ts" for hardhats?

SAFETY TRAINING TOPIC

Respirator Use and Testing

RESPIRATOR TYPES

Respirators range from simple dust masks to Self-Contained Breathing Apparatus (SCBA) units to units connected via hose to a central air supply.

RESPIRATOR SELECTION

Normally, someone else will select the respirator you need for the job at hand. However, be sure you check that the respirator is adequate for the job.

Respirators are often used in conjunction with confined spaces, so check your confined entry permit for the hazards contained in the area, if appropriate.

Your supervisor can help you determine the correct respirator for the job.

PREPARE YOURSELF

You must be respirator-qualified and clean-shaven to use any respirator other than a dust mask.

If you have clogged sinuses, use a decongestant nasal spray or saline solution to clear them. Taking a systemic (oral) decongestant will leave you in a state of vasodilation-check with your safety director before doing this. Under no circumstances should you take an over-the-counter antihistamine, as these increase drowsiness that can endanger you.

If you are a smoker, abstaining from smoking for several hours or days prior to planned respirator work will increase your respirator endurance dramatically by increasing your lung efficiency and lowering the levels of carbon monoxide in your blood by several orders of magnitude.

PREPARE THE RESPIRATOR

If it's a filtering-type unit, ensure it has the right filter, canister, or cartridge attached.

If SCBA, ensure the tanks have enough pressure for the duration of the job.

If it's hose-connected, help your attendant to check the hoses, or wait while it's done before entering the work area.

Wipe the facemask with an alcohol pad or similar disinfectant prior to use.

Check the respirator fit using the negative pressure method shown in training. If, for example, you are using a canister filter, hold your hands over the canisters and inhale. The filter should collapse around your face and stay collapsed until you exhale. Your procedures may also call for you to perform the positive pressure method. If so, take care not to blow too hard.

Test the vent port to ensure you can exhale through it.

USE THE BUDDY SYSTEM

If you feel fatigued, panic, nausea, or other symptoms of distress coming on, motion to your coworkers that you must leave the area. If there is only one coworker with you, help him or her get to a stopping point and leave together. Report to your foreman immediately.

If you sense fatigue, panic, nausea, or other symptoms of distress in a coworker, motion to the person to leave the area. Note any unusual circumstances in the environment. If someone so motions you, leave the area. Report to your foreman immediately.

If the respirator appears to be failing, leave the area immediately. Report to your support team or your foreman.

RESPIRATOR CARE

Clean your respirator after each use.

Before storing it, remove any cartridges or filters and discard them. Clean your facemask with an alcohol pad or similar disinfectant. After giving it time to dry, store it in a clear poly bag with your name on it.

Store the respirator so that you protect it from damage, contamination, dust, sunlight, moisture, and anything else that might harm it.

REVIEW AND DISCUSSION

- Who usually selects the respirator for a given job, and who should double-check?
- What criteria must you meet to use a respirator other than a dust mask?
- What should you do if you have clogged sinuses?
- If you are a smoker, how can abstaining for a few hours or days before using a respirator help you?
- What should you ensure, if you are using a filtering unit?
- When should you clean the respirator?
- How should you clean the respirator?
- How do you check for respirator fit?
- If you sense fatigue or panic in a coworker or in you, how does the buddy system work?
- What are some tips on caring for your respirator?

SAFETY TRAINING TOPIC

Working Hot

WHY THIS IS IMPORTANT

Every time you work on energized circuits you risk an arc blast or electric shock.

If you take the necessary precautions, you can eliminate the risks.

THE POTENTIAL HARM

Temperatures generated by short-term contact with a circuit even as low as 120V can be 10 times higher than what it takes to cook your tissues.

It takes very little electricity to electrocute you. The amount of current it takes to light a 75W lamp is past the threshold of what it takes to cause fibrillation. When you think of fibrillation, think of your heart being rendered useless.

Electrocution burns take place from the inside out.

Contact time is an important determinant in the severity of damage. The less time, the better. Other factors that determine the severity of damage include voltage, resistance, frequency, and victim characteristics such as age, physical condition, and size, plus some environmental factors.

SHOCK CHARACTERISTICS

At 60 Hz, AC shock produces a tingling sensation that ranges from slight to violent.

DC shock produces a warmth sensation that ranges from warm to burning hot.

When the current through your body reaches a certain point, it paralyzes your arm muscles so you can't let go. This is what people are talking about when they refer to "let-go current."

The let-go current threshold decreases as frequency increases. It takes less current to pass the let-go threshold when you are working on a 400 Hz UPS than when you are working on a 60Hz system.

SHOCK CURRENT PATH

The path the current takes through your body can determine whether you survive or not.

That's why we take measurements with one hand on the probe and one hand in a pocket, rather than with both hands-on probes and a path established across the heart.

That's why we also try to eliminate pathways between feet and hands.

Your heart is on your left side. Thus, if you must choose a path that includes a hand and a foot, choose the right hand and foot rather than the left hand and foot.

PREVENTING ELECTRIC SHOCK

Working on de-energized circuits is an obvious way to prevent shock, but it depends on proper lockout/tagout, proper testing for voltage, and using safety grounds.

Non-compliance with the requirements for ensuring circuits are de-energized is rampant, and the body count from non-compliance is high.

Using the appropriate PPE and following hot work procedures is your first line of defense, not your last.

ELECTRIC ARC BLAST CHARACTERISTICS

The heat from an electric arc can reach temperatures four times as hot as the surface of the sun.

The pressure wave generated by an arc fault can hurl you away from the heat source but usually causes other injuries also. In worst-case scenarios, the pressure wave acts like a giant hammer. The pressure waves are sometimes strong enough to level concrete walls.

PROTECTION FROM FLASH

Wear the required PPE, such as a flash suit, hood, and face shield.

Wear clothing resistant to flash flame wherever exposure to an electric arc flash is possible. In the several seconds, it takes to remove clothing or extinguish flames, you can be subject to deep and possibly fatal burns.

Reduce the likelihood of arc faults, to begin with. For example, make test connections one lead at a time to prevent creating an ionized path that completes a circuit between an energized terminal and the ground. Another way is to remove as many loads from the equipment as possible before working on it.

REVIEW AND DISCUSSION

- Why is it important to know the principles of working hot?
- What are the characteristics of AC shock?
- What are the characteristics of DC shock?
- What is let-go current?
- Regarding hands and feet, what is the proper way to take measurements, and why?
- What is your first line of defense for preventing electric shock?
- How hot can an arc blast get?
- Is the pressure wave from an arc blast powerful? How so?
- What are some clothing and PPE issues, in regard to arc flash and arc blast?
- How can you prevent an arc fault in the first place?

OSHA Proposes New Heat Safety Rule: 4 Steps to Take Now



by **Carol Warner**
July 8, 2024
LEGAL
3 MINUTE ENGAGEMENT

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The Occupational Safety and Health Administration (OSHA) has issued a [proposed heat safety rule](#) that aims to protect workers from extreme heat as [persistent heat waves bring record-breaking temperatures](#) across the U.S.

ule, if finalized, would establish the first-ever national heat safety standard. Here's what you need to know about the proposed regulation – and steps you can take now to protect workers

from extreme heat this summer.

Heat Safety: What's In the Proposed Standard?

The proposed national heat safety standard would:

- With limited exceptions, apply to all employers conducting outdoor and [indoor](#) work in all general industry, construction, maritime, and agriculture sectors where OSHA has jurisdiction
- Require employers to create a plan to evaluate and control heat hazards in their workplace, and
- Clarify employer obligations and the steps necessary to effectively protect employees from hazardous heat.

Specifically, the proposed heat safety rule would require employers to:

- Develop an injury and illness prevention plan to control heat hazards in workplaces affected by excessive heat
- Evaluate heat risks and – when heat increases risks to workers – implement requirements for drinking water, rest breaks and control of indoor heat
- Develop a plan to protect new or returning workers unaccustomed to working in high heat conditions
- Provide heat safety training to workers
- Develop and implement procedures to respond if a worker experiences signs and symptoms of a heat-related illness, and
- Take immediate action to help a worker experiencing signs and symptoms of a heat emergency.

“Workers all over the country are passing out, suffering heat stroke and dying from heat exposure from just doing their jobs, and something must be done to protect them,” [Assistant Secretary for Occupational Safety and Health Douglas L. Parker](#) said in a [press release](#). “Today’s proposal is an important next step in the process to receive public input to craft a ‘win-win’ final rule that protects workers while being practical and workable for employers.”

In response to the proposed heat rule, the Kitchen Cabinet Manufacturers Association recently held a [webinar on the proposed rule](#), which featured [Manesh K. Rath](#), a partner at Keller & Heckman LLP, who specializes in occupational safety and health laws.



What Happens Next?

As part of [the rulemaking process](#), OSHA will publish the proposed rule in the Federal Register. Afterward, the public will be able to submit comments for 120 days, which the agency will then use to develop a final rule.

That's assuming all goes according to plan. But [a recent Supreme Court ruling](#) could block the proposed rule.

In [Loper Bright Enterprises v. Raimondo](#), the Court overruled *Chevron* and decided that courts are to use their own independent judgment when interpreting federal statutes. The bottom line: The Court's ruling will make it easier for critics to challenge OSHA's proposed rule.

So we're going to have to wait and see how this all pans out.

How to Protect Employees Now

In the meantime, many workers across the U.S. are being exposed to extreme heat – which can be fatal.

Case in point: In April, OSHA determined [a worker died of heatstroke on his first day](#) at work because a farm labor contractor did not do enough to protect its employees from heat-related hazards. The agency cited the contractor for exposing workers to high heat in direct sunlight and proposed \$27,665 in penalties.

Hopefully, you never find yourself in a similar situation. Here are four steps employers can take to help protect workers from heat safety hazards:

1. Stress the importance of hydration to prevent dehydration. Provide water – and perhaps even [incentivize water breaks!](#)
2. Schedule regular rest breaks. Provide shaded areas to help workers cool down.
3. Provide adequate ventilation. A properly functioning HVAC or misters and fans can help protect workers from heat-related illnesses.
4. Educate employees to recognize the symptoms of heatstroke and other heat-related illnesses. Provide training on how to help workers cool down if they are exhibiting signs of heatstroke or other heat-related illnesses.



Worker Didn't Turn Off Equipment Before Servicing, Now He's Dead



HAZARDS
3 MINUTE ENGAGEMENT

by Merriell Moyer
March 25, 2024

SHARE ON



An employer's failure to ensure that employees turned equipment off before performing maintenance led to a fatality, according to a federal report.

The U.S. Mine Safety and Health Administration (MSHA) [investigated the incident that saw a 24-year-old worker killed when he became entangled in a rotating drill steel](#) while changing out the steel on a running machine.

He was found entangled in drill steel

Noah Dinger was working for contractor Moran Mining USA Inc. at the Stillwater Mine, an underground platinum mine in Stillwater County, Montana.

At 7 p.m. on Nov. 12, 2023, Dinger started his shift and was assigned to operate a roof bolting machine along with another miner who followed along in a truck to clean up debris.

At midnight, the other miner was pulled away to perform a different task. When he resumed his work following the roof bolting machine, he noticed that Dinger wasn't in the cab of the vehicle.

The other miner walked down to where the roof bolting machine was parked and found Dinger [entangled in the machine's drill steel](#). He tried to free Dinger from the steel, but failed. Eventually, he ran to his truck to get a hacksaw, which he used to cut Dinger's clothing to free him and then began CPR.



After spending some time performing CPR, the other miner realized he needed help and called for a medic. He then resumed CPR until the medic arrived at 2 a.m. on Nov. 13.

Later, emergency responders arrived and pronounced Dinger dead at 5:11 a.m.

Operator's manual warnings ignored

MSHA investigators examined the roof bolting machine, which was fitted with a bolt-driver, bolt carousel and a rotating drill head.

The machine is operated from controls found inside the cab, which allows the operator to drill holes and install bolts from a safe point of operation. The investigation found no defects with the machine that would have contributed to the incident.

Investigators determined that the only time the operator needed to approach the bolt carousel and drill head was when they were refilling the bolts or when changing drill steels. They found evidence of a broken bit and the installation of a new drill steel.

While consulting the machine's operator's manual, the investigators found a warning statement indicating that no one should be near the drill or bolt driver while it was in operation. It also warns against working around the machine while wearing loose clothing.

Interviews with the other miner revealed that when he checked on Dinger, he discovered that the machine was still operating and that he had to [de-energize it before he attempted to free him](#). This led investigators to determine that the warnings in the manual weren't followed.

Employer policy wasn't followed

A similar incident that didn't result in a fatality occurred at the mine on June 18, 2023.

Following that incident, the mine implemented a new policy prohibiting its workers and contractors from threading drill steel by hand while the drill is rotating.

However, MSHA determined that this policy wasn't followed during the incident.

New procedure requires 2 workers, signage, electronic barriers

Investigators found that the incident's root cause was the contractor's failure to ensure that the power was off and that the equipment was blocked against hazardous motion.

To prevent a similar incident, the contractor developed a new written procedure that requires two miners to operate roof bolting machines.

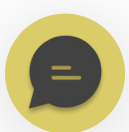
It also placed signage at the front of the machine restricting access while the drill is energized.

The contractor is also working with the equipment manufacturer to [install electronic barriers that will de-energize the machine automatically](#).



Merriell Moyer

Merriell researches and writes about occupational health and safety. He was an investigative and breaking news reporter for the Lebanon Daily News - part of the USA Today Network.



New OSHA Rule Lets Union Reps Participate in Safety Inspections

Safety|NewsAlert

OSHA

Safety|NewsAlert

by Carol Warner
April 8, 2024
OSHA
3 MINUTE ENGAGEMENT

SHARE ON



A new [OSHA](#) rule – the so-called “[walkaround](#)” rule – clarifies that employees may designate a non-employee third party, such as a union rep, to be their representative and accompany OSHA inspectors during workplace safety inspections.

The [final rule](#) was published in the Federal Register on April 1 – and is set to take effect on May 31.

Why was the rule changed?

In *Nat'l Federation of Independent Business v. Dougherty*, No. 3:16-CV-2568-D, 2017 U.S. Dist. LEXIS 15915 (N.D. Tex. 2/3/17), a federal court in Texas found that OSHA's practice of allowing “third parties to be employee walkaround representatives was a valid interpretation of the law but was not consistent with the regulation as then written,” the agency explained.

Shortly after the court's decision, OSHA began the rulemaking process to correct the deficiency.

What did the new OSHA rule change?

Prior to the new OSHA rule, employees' representatives generally had to be employees of the company, unless an OSHA inspector decided a third-party expert was “reasonably necessary” to conduct “an effective and thorough physical inspection of the workplace.”

The reg included specific examples of professionals who qualified as a third-party expert, such as an “industrial hygienist or safety engineer.” In such cases, the third-party expert was allowed to accompany the OSHA compliance officer during the inspection.

Under the new rule, employees will have the right to choose whether the representative is an employee or a third party. Even so, the representative must be “reasonably necessary” to aid the inspection.

According to an [FAQ guidance sheet](#) released by OSHA, the revisions in the walkaround final rule clarify that:

- The representative(s) authorized by employees may be an employee of the employer or a non-employee third party
- Employees’ options for third-party representation during OSHA inspections are not limited to individuals with formal credentials, such as an industrial hygienist or safety engineer, and
- A third-party rep authorized by employees may be reasonably necessary to conduct an effective and thorough physical inspection of the workplace by their knowledge, skills, or experience. OSHA says this may include technical knowledge or practical experience about the processes and hazards present in the workplace, or language and communication skills that facilitate feedback from employees.

Conditions on third-party reps

In some cases, third-party reps can be denied access to participate in the safety inspection.

First things first: The OSHA compliance officers still have the authority to determine whether a third party has been authorized by employees to be their walkaround representative.

Plus, OSHA compliance officers have the authority to “prevent an individual from participating in the walkaround inspection if their conduct interferes with a fair and orderly inspection.”

Moreover, the new OSHA rule does not affect the employer’s right to limit the entry of employee-authorized reps into work areas that contain trade secrets.

What does this mean for employers?

A new OSHA rule often means new compliance obligations.

In this case, the rule clarifies employees’ right to designate a walkaround rep during an OSHA safety inspection but “does not impose any compliance obligations for employers,” OSHA clarified in the FAQ guidance.

But the final rule “does not provide employers with a [mechanism to object](#) to the selection of a non-employee third-party representative,” according to employment attorneys [Tim Garrett](#) and [Maja Hartzell](#) of the firm [Bass, Berry & Sims](#).

According to the FAQ guidance, employers may object to a representative by raising concerns to the OSHA compliance officer, who has the authority to resolve the dispute.

Employment attorney Jon Hyman [predicts](#) the rule “will almost certainly face a court challenge before” it is scheduled to take effect.

It’s unclear whether additional guidance will be published before May 31 when the new rule takes effect. We’ll keep you posted.



He Said Work Caused Hearing Loss — But Also Admitted This



Court Decision

Safety|NewsAlert

by Tom D'Agostino

July 9, 2024

WORKERS' COMPENSATION

3 MINUTE ENGAGEMENT

SHARE ON



An employee who said work caused his hearing loss applied for workers' compensation benefits. But unfortunately for him, he also provided testimony that cast doubt on the assertion that his hearing loss was caused by exposure to noise at work.

In the end, a court determined that he was not entitled to collect workers' compensation benefits because he did not establish the requisite link between his hearing loss and his job.

Employee Suffered Hearing Loss

Andrew DeWolf worked as an emergency medical technician for about 15 years.

In the summer of 2020, DeWolf filed a claim for [workers' compensation benefits](#). He said he sustained hearing loss as a result of repeated exposure to loud radio and siren noise while on the job.

Although he said he worked on a full-time basis and sometimes worked more than 60 hours per week, he did not specifically say how often he was exposed to loud noise at work.

In addition, he was not able to say what decibel level of noise he was exposed to, and he admitted that he could carry on a conversation inside his work vehicle while the vehicle's siren was operating.

Firearms May Have Caused Hearing Loss

But the real kicker was this: DeWolf admitted that he has used firearms to hunt recreationally for more than 25 years – and has not consistently worn ear protection when doing so.

DeWolf tried to support his claim for benefits by presenting the testimony of two otolaryngologists, also known as ENTs. But the testimony of those two witnesses did not paint a convincing picture that DeWolf's hearing loss was caused by his exposure to workplace noise.

The first ENT diagnosed DeWolf as having moderately severe to severe bilateral sensorineural hearing loss. As to causation, he said there was “a very good chance” that the hearing loss was related to noise exposure in the workplace setting. But he also admitted that he was not provided with any information about the decibel levels that DeWolf was exposed to while he was at work. Perhaps even worse, he said he was not made aware of DeWolf's use of firearms.

The second ENT said DeWolf's hearing loss was probably related to some type of noise exposure. But he also said he did not have an opinion as to whether the hearing loss was caused by exposure to noise at work. The second ENT added that he was not given information about DeWolf's level and duration of exposure to noise at work.

Initial Decision Granted Benefits

Despite this shaky foundation, a workers' compensation law judge initially decided that DeWolf was in fact entitled to receive workers' compensation benefits for his hearing loss. It was a short-lived victory, as a workers' compensation appeals board reversed the workers' compensation law judge's decision.

The board determined that DeWolf did not meet his burden to produce competent medical evidence that established a relationship between his injury and his employment. More simply put, he did not come up with medical evidence showing that workplace noise caused his hearing loss.

After the board reversed the workers' compensation law judge's decision to award benefits, DeWolf appealed.

A state trial court affirmed the board's decision to deny benefits.

Must Establish Link to Get Benefits

The court explained that to be entitled to benefits, DeWolf had to "establish a recognizable link between [his] condition and a distinctive feature of [his] occupation through the submission of competent medical evidence."

Translation: Prove with medical evidence that noise at work caused your hearing loss.

As far as level of proof, the court said, "a medical opinion on the issue of causation must signify a probability as to the underlying cause of the claimant's injury which is supported by a rational basis."

DeWolf did not meet that standard, the court said.

Instead, the board permissibly found that DeWolf's medical evidence of a causal relationship was speculative.

[The board's decision to reject DeWolf's claim for benefits was affirmed.](#)

Matter of DeWolf v. Wayne County, No. CV-23-2014, 2024 N.Y. App. Div. LEXIS 3579 (N.Y. Sup. Ct. 6/27/24).