

Wood Pole Rescue



1. Scope

This work practice provides a step-by-step procedure for performing wood pole rescue. Incident reporting, administering CPR and first aid, use of an AED, securing the site, gathering evidence, and adherence to any other protocols and procedures following an incident are outside the scope of this work practice.

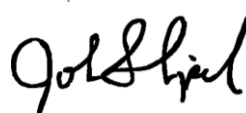
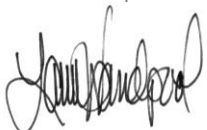
This work practice assumes a four-person crew.

This work practice assumes no bucket / aerial lift is available onsite at the time of incident.

This work practice is intended to capture an 80% scenario; that is, one that would occur in 80% of instances. It is understood that in a real-life emergency situation, crews will work with whatever tools and equipment are available at the time to perform a rescue.

2. Application

This work practice is for qualified Seattle City Light (SCL) electrical line workers who perform work on poles in the SCL electrical overhead distribution system. Section 3 defines the qualifications required to perform this work.



3. Qualified Rescuer

On a site where an electrical hazard may require an employee to be rescued from a wood pole, a qualified rescuer must be on the ground in the immediate vicinity of the work. The term “qualified rescuer” corresponds directly to the definition of “qualified electrical employee” in Washington Administrative Code (WAC) 296-45-065. It is defined as a person who is trained and competent in:

- The skills and techniques necessary to distinguish exposed live parts from other parts of electric equipment
- The skills and techniques necessary to determine the nominal voltage of exposed live parts
- The minimum approach distances specified in this chapter corresponding to the voltages to which the qualified electrical employee will be exposed and the skills and techniques necessary to maintain those distances
- The proper use of the special precautionary techniques, personal protective equipment (PPE), insulating and shielding materials, and insulated tools for working on or near exposed energized parts of electric equipment
- The recognition of electrical hazards to which the employee may be exposed and the skills and techniques necessary to control or avoid these hazards

It is assumed that all SCL electrical line workers who perform work on poles have completed the necessary training to be considered a qualified rescuer.

4. Required PPE

The following PPE is required for wood pole rescue:

- Work boots
- Flame-resistant (FR) clothing of the appropriate class
- Safety glasses
- Electrical insulating rubber gloves appropriate to voltage
- Hard hat

It is assumed that all SCL electrical line workers who are performing work on poles are already wearing, or have in their possession, the required PPE.

5. Required Tools and Equipment

The following rescue tools and equipment shall be available as close to the work location as possible:

- Handline assembly (already installed on the pole), including:
 - Ox Block
 - “Becky” (an 8-ft length of rope for securing the Ox Block to the pole)
 - Handline (a minimum 80-ft length of rope with two snap hooks)



Handline Assembly



Ox Block

- Climbing gear (in service vehicle or nearby), including:
 - Body belt
 - Climbers
 - Appropriate tools (in tool pouch attached to body belt), including:
 - Skinning knife
 - Side cutters
 - Crescent wrench
 - Screwdriver
 - Fall restraint strap (attached to body belt)
- AED (in service vehicle)
- First aid kit (in service vehicle)
- Portable communication device (radio, mobile phone, etc.)
- Hotstick (extendable, in service vehicle)

6. Steps

IMPORTANT: Time is critical! A person may only have four minutes where administered CPR is effective. The goal is to get the victim to the ground as **QUICKLY** and **SAFELY** as possible.

Step 1

Size Up the Situation.

- **Call to the victim.** Is the person conscious or unconscious?
- Has there been electrical contact?
- What is needed? (AED, first aid kit, etc.)
- Identify hazards: downed live wires, loose tools or equipment, etc.
- Is there a cutout?



Step 2

Delegate Critical First Tasks.

- Command a crewperson to call the SOC or 911. This person is also responsible for flagging down the emergency vehicle when it arrives.
- Command a second crewperson to retrieve the AED and a hotstick.



Step 3

Gear Up.

- Retrieve and put on climbing gear.
- Continue to speak to the victim.

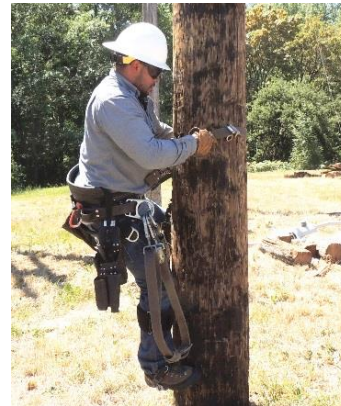


Step 4 **Jump on Pole.**

- Jump on the pole using step-touch potential technique.
- NOTE:** Jumping on the pole eliminates the risk of touch potential in case the pole is energized.



Step 5 **Secure Fall Restraint Strap and Begin Ascent.**



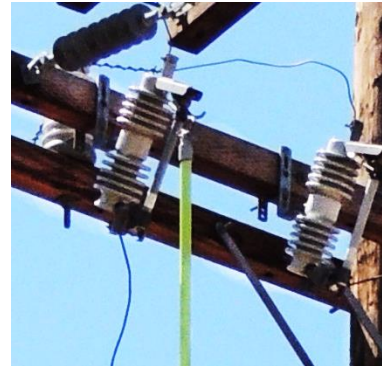
Step 6 **Get Hotstick.**

- Command a crewperson to send up the hotstick using the handline assembly already on the pole.



Step 7 Open Cutout.

- Open the cutout using the hotstick.
- Send the hotstick back down.



Step 8 Secure Victim with Handline.

- Wrap the handline around the victim's chest under the armpits and secure with three half hitches no more than a fist away from the victim's chest.

NOTE: Take care that the line, when passed around the victim's back, does not catch on tools from the victim's body belt.



Step 9 Wrap Handline Around Ox Block.

- Remove any excess slack from the line after wrapping it around the Ox Block.



Step 10 **Cut Victim Free.**

- Cut the victim free from their body belt using the skinning knife.



Step 11 **Lower Victim to Ground.**

- As the victim is lowered to the ground, the remaining crew members catch and guide the body to a flat position on the ground, away from the pole, so that first aid can be safely administered.



7. Sources

Dunlap, Rodney; SCL Line Crew Chief and subject matter expert for 0058.31
(rodney.dunlap@seattle.gov)

Fowler, Chad; SCL Lineworker and subject matter expert for 0058.31
(chad.fowler@seattle.gov)

Jamison, Brian; SCL Lineworker and subject matter expert for 0058.31
(brian.jamison@seattle.gov)

Shetab, Muneer; SCL Standards Engineer and co-ordinator of 0058.31
(muneer.shetab@seattle.gov)

Vanderpool, Laura; SCL Standards Technical Writer and co-ordinator of 0058.31
(laura.vanderpool@seattle.gov)

8. References

WAC 296-45-065; Electric Power Generation, Transmission, and Distribution, Training