

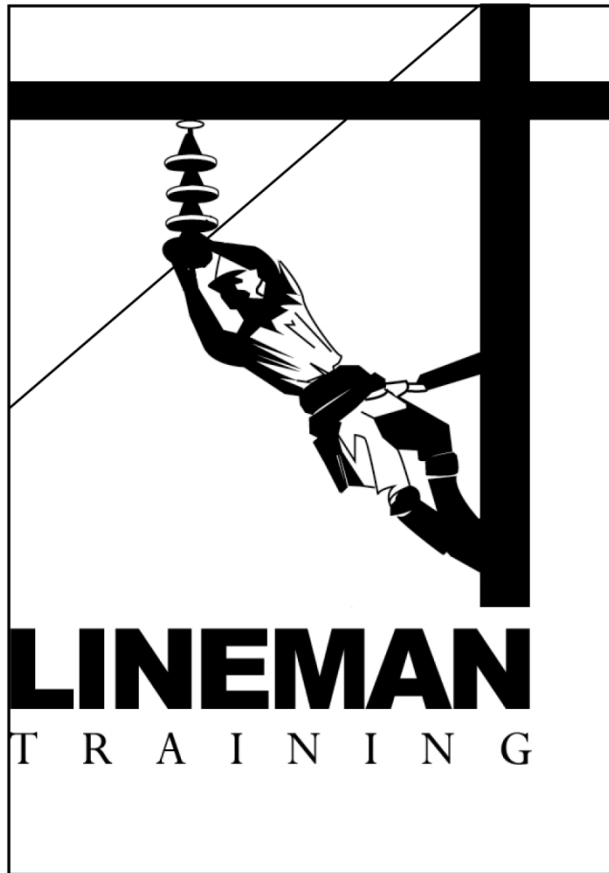


Assessment for Lineworker Progression (ALP)

Preparation Guide

Assessment for Lineworker Progression

Test Preparation Guide



Learning Services
Livermore Training Center



*Pacific Gas and
Electric Company*[®]

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Assessment for Lineworker Progression

Introduction The assessment for lineworker progression is designed to let persons who desire to be apprentice linemen demonstrate basic aptitude in common lineman activities that are required for the lineman craft.

Experience working with heights During the assessment you will be required to climb wooden poles as well as work from an aerial lift at a height from the ground. If you find that you are uncomfortable with heights, you should reconsider entering the lineman craft. The majority of PG&E linework requires challenging physical activity in elevated positions.

Physical strength Linework is outside construction work that requires the ability to perform strenuous activities without assistance. You will have several opportunities to show that you can perform common tasks unaided.

Following instructions Working close to energized high-voltage equipment is quite safe, provided you know the work procedures and safety rules and provided that you can follow detailed instructions or work plans. The inability to recall instructions will put you and the people you work with at risk. One component of the assessment requires that you demonstrate your ability to follow precise instructions.

Practice There are 5 individual events that comprise the assessment. You will be allowed to practice a total of six times. It will be up to you to decide which events you wish to practice and how many times you wish to practice each one. Your total number of practices may not exceed six.

For example, you might choose to practice events 1 through 5 one time each and then practice event 1 a second time. That would be a total of six practices. Or, you could practice event 1 three times, events 2 through 4 one time each, and decide to skip practicing event 5 altogether. Again the total number of practices is limited to six attempts.

Prior to the assessment, we will explain the events and then you can choose the practices that you feel you need. Choose wisely.

It is important to remember that a *practice* session is just that - practice. **Successfully completing a practice does *not* count toward successfully completing an event.**

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Assessment for Lineworker Progression, Continued

Standards Safety is the most important component of the assessment. Follow directions carefully. Ask for clarification **before** you begin if you do not understand the task at hand. Work carefully. Disregard for safety will cause disqualification.

The assessment is not a race against the clock. Ample time has been provided for you to complete the required tasks. Faster times will **not** improve your score. It is more important that you complete a task correctly than it is to complete it quickly.

It is important, however, that you complete all required tasks within the time allowed. Time is an essential component of each task and those who take too long will be disqualified.

In order to receive a qualifying score on the Assessment for Lineworker Progression you must meet the standards of achievement for **all** 5 events that comprise the assessment.

Failure to meet standards You are allowed to complete all 5 events. Although failure to pass one or more events will prevent you from becoming an apprentice lineman at this time, in most cases you may be permitted to participate in all the events. If you do not qualify on all 5 events, PG&E Human Resources representatives will be available to discuss next steps and answer any questions you may have.

Weight Limit All candidates will be weighed in before the assessment. The weight limit of our equipment is 300 lbs. Our equipment may not operate safely for candidates who weigh over 300 lbs. You must notify us in advance if this applies to you.

Clothing Requirements For your safety, you must wear hard-soled boots with square cut heels that extend at least ½ inch beyond the sole (see examples following page). Long pants and a long-sleeve shirt are also required. PG&E will provide all safety equipment, including a hard hat, gauntlet gloves, protective eyewear, etc.

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**Ability to
Perform
Assessment**

Some of the assessment activities may require unfamiliar, strenuous physical activity. Before beginning any assessment activity, you must bring to our attention a request for reasonable accommodation and/or any related issue that may limit your ability to perform the activity.

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Assessment for Lineworker Progression

Footwear Examples



Required Style – Hard sole, ankle support, heel extends at least ½ inch beyond sole. Heel must be clearly defined with a sharp angle (square cut).



Unacceptable – Insufficient heel. Tapered angle on heel may cause slipping from pole step



Unacceptable – Insufficient heel, open toe, no back



Unacceptable – Insufficient heel, soft sole

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Climbing Wooden Poles

Introduction Much of the lineman's work occurs at the top of wooden poles. After training, all linemen must be able to climb and descend wooden poles. In this event you will demonstrate that you can follow simple instructions and can safely climb and descend a wooden pole.

Safety During this event you will use personal protective equipment to ensure your safety. The school will provide the following safety items:

- Gauntlet, leather gloves
- Hard hat
- Safety glasses
- Full body harness
- Fall arrest lanyard

Each candidate must provide acceptable footwear as follows:

- Boots with hard soles and **square cut** heels at least ½ inch high are required. Shoes and flat-soled footwear (tennis shoes, athletic shoes and shoes or boots without an acceptable heel) are prohibited.
- A long sleeve shirt is required.
- Long pants are required. Shorts are prohibited.

If you drop your hard hat while ascending, stop immediately and descend to retrieve your hard hat. Put your hard hat back on and start the climb again. The stopwatch will be reset. If you drop your hard hat while descending, continue to descend.

Climbing technique PG&E uses a free climbing technique on wooden poles. In free climbing, the positioning strap is not used while ascending or descending the pole. You use your legs to climb and your arms only to provide balance. You do not climb by using your arms to pull yourself up the pole.

You are not a trained climber so you will use a modified free climbing technique. You will use the metal pole steps to support your feet while climbing. You will place your hands on the pole steps for balance. The body harness and fall arrest cable will prevent you from falling if you slip from the pole for any reason.

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Climbing Wooden Poles, Continued

Procedure The following procedures will apply:

1. Put on all personal protective equipment.
2. When you reach the bottom of the pole, check that the boom is directly over your head.
3. Once told to begin, climb to the top step of the pole.
4. If you drop your hard hat while ascending, stop immediately and descend to retrieve your hard hat. Put your hard hat back on and start the climb again. The stopwatch will be reset and you will have the full time for this climb. If you drop your hard hat while descending, continue to descend.
5. Use only your legs to climb. Do not pull yourself up using your arms.
6. Use your hands for balance and support.
7. Stop when you are standing on the top pole steps and pause for 20 seconds. The evaluator will time you and will tell you when to descend.
8. When you are told to descend, climb down from the top step all the way to the ground.
9. Use your hands on the pole steps for balance and support.
10. Stop when you are standing on the ground. Do not jump from the pole.

Although this is a timed event, you must climb and descend at a pace that is consistent with safety and control.

Scoring In order to receive a qualifying score on this event:

- You must stand on the top steps for 20 seconds until the evaluator tells you to descend.
- You must climb, stand at the top of the pole, and descend the pole within 2 minutes.
- You must climb and descend without losing your grip on the pole or pole step. You must not slip from the pole step. You must not jump from the pole.

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Working from an Aerial Lift

Introduction PG&E linemen must be able to work from an aerial lift. In this event, you will demonstrate that you can follow simple instructions and can perform simple tasks while in an elevated aerial lift.

Safety During this event you will use personal protective equipment to ensure your safety. The school will provide the following safety items:

- Gauntlet, leather gloves
 - Hard hat
 - Safety glasses
 - Full body harness
 - Safety lanyard
-

Technique You will be fitted with a full body harness and safety lanyard. The aerial lift has two buckets. You will be in one bucket and an evaluator lineman will be in the other. The evaluator will operate the controls of the aerial lift and will accompany you up to the work location.

You will be required to attach an insulator onto a crossarm at the top of the pole. Once you have been raised to full height, the evaluator will indicate a vertical hole in the crossarm into which you must insert the insulator's mounting bolt. Once you have placed the mounting bolt through the hole, you will thread the retaining nut onto the bolt and tighten it "finger-tight."

At the start of the evaluation, the insulator and bolt will be located in a materials bag attached to the crossarm. You will remove the insulator from the bag, place it in the indicated hole, and then attach and tighten the nut.

After the insulator is correctly mounted on the crossarm, the evaluator will tell you to remove the nut and insulator and place them in the materials bag.

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Working from an Aerial Lift, Continued

Procedure The following procedures will apply:

1. Put on all personal protective equipment. Gloves must be worn at all times.
2. Attach the safety lanyard from your body harness to the aerial lift and then enter the bucket on the aerial lift. The evaluator will check all connections before you are lifted to the work location.
3. Ascend in the bucket to the work location. You will be positioned in front of the crossarm, one arm's length (your arm's length) away.
4. Remove the insulator from the materials bag. Timing begins when you reach into the bag.
5. Insert the threaded bolt that extends from the bottom of the insulator into the hole in the crossarm. Obtain the retaining nut and thread it onto the insulator bolt (finger tight).
6. After approval from the evaluator, remove the insulator from the crossarm.
7. Place the insulator and the nut into the materials bag (timing ends).
8. Request that materials bag be lowered to the ground.
9. After the bucket of the aerial lift is returned to its stored position, remove the safety lanyard and leave the aerial lift. Face the truck while climbing down from the aerial lift.

Scoring In order to receive a qualifying score on this event:

- You must correctly install the insulator on the crossarm and tighten the nut to finger tight.
- You must remove the insulator from the crossarm and place it and the nut in the materials bag.
- You must not drop the insulator or the nut to the ground.
- You must complete your work within 2 minutes. The time starts when you reach into the materials bag and ends when you return the insulator and nut to the materials bag.

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Installing a Crossarm

Introduction In many cases, the lineman works on facilities that are located above his head. You must be able to raise and lower materials and use tools in this work area. In this event, you will demonstrate that you can safely lift and install a heavy crossarm. You must lift the crossarm from waist level and must install it at eye level.

Safety During this event you will use personal protective equipment to ensure your safety. The school will provide the following safety items:

- Gauntlet, leather gloves
 - Hard hat
 - Safety glasses
 - Body belt and positioning strap
-

Technique Linemen are expected to be able to install crossarms without assistance. The person on the ground uses a rope to hoist the crossarm up to the lineman on the pole. The lineman places the crossarm across his positioning strap, installs the crossarm bolt and then raises the crossarm and places the bolt through a hole in the pole.

You are not a trained climber so you will do this event at ground level. You will be fitted with a body-positioning belt and positioning strap and will be attached to the pole at ground level. The crossarm will be placed across your positioning strap and you will be given a mounting bolt with a washer.

After you are told to begin, you will place the mounting bolt through the crossarm and then raise the crossarm to eye level and insert the bolt into the mounting hole on the pole. The holes are numbered and you must insert the bolt into the designated hole.

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Installing a Crossarm, Continued

Procedure The following procedures will apply:

1. Put on all personal protective equipment including the body belt and positioning strap.
2. Attach positioning strap around the pole (the evaluator will assist you) and lean back against the belt (beginning position).
3. Place your feet on the supporting pole steps just above ground level.
4. The evaluator will hand you the crossarm to balance on the positioning strap.
5. The evaluator will hand you the crossarm bolt with the washer and indicate the correct hole in the pole for the bolt.
6. When told to begin, you will insert the bolt into the crossarm, lift the crossarm and insert the bolt into the mounting hole. Place the crossarm firmly against the pole. Timing starts when you are instructed to begin.
7. When instructed, remove the crossarm from the pole and hand the bolt and washer to the evaluator. Timing ends when you hand the bolt and washer to the evaluator.

Scoring In order to receive a qualifying score on this event:

- You must not drop the crossarm, washer or bolt. They must not touch the ground.
- You must mount and remove the crossarm within 90 seconds.
- You must insert the bolt into the correct hole on the pole.
- You must not remove either of your feet from the foot support pole steps.

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Following Directions

Introduction Before linemen begin a job, the foreman on the job gives the workgroup a briefing that covers the day's work. At PG&E, this is called a "tailboard briefing" and it covers all the important aspects of the work that will be accomplished. Each lineman must understand, remember and perform his specific duties as described in the tailboard briefing.

In this event, you will be given instructions to do simple tasks with common items. The specific tasks will be selected at random. You must complete the tasks correctly in the time allowed.

Safety During this event you will use personal protective equipment to ensure your safety. The school will provide the following safety items:

- Gauntlet, leather gloves
- Hard hat
- Safety glasses

Technique The event begins with 16 common items that are placed on 4 tables (4 items per table). You will be required to move 3 items in the order given from their initial locations to the specified locations.

The evaluator will mix the order of the cards (shuffle) so they have no specific order. You will be assigned the items to move and their destinations by selecting a card from a mixed deck.

This is an oral briefing. You may not read or study the cards.

One at a time, the evaluator will name each item and tell you its destination. After you have been told the names of all 3 items and their destinations, you have up to 60 seconds to ask any questions about what you are supposed to move and where. At the end of the 60 seconds you may not ask any more questions. When told to begin you must find and move the specified items to their specific destinations in the correct sequence. Once you are told to begin, you will have 2 minutes to find and move all items.

Allowing any item to hit the ground will cause disqualification.

Safety is the first consideration. Do not run.

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Following Directions, Continued

Procedure The following procedures will apply:

1. Put on all personal protective equipment.
 2. Receive job tailboard.
 3. Ask clarifying questions (up to 60 seconds maximum).
 4. Begin to move items when instructed to start.
 5. Move the items in the order they were given.
 6. Complete moving items within 2 minutes.
 7. Do not drop any item or cause it to hit the ground.
 8. Do not cause a safety hazard.
-

Scoring In order to receive a qualifying score on this event:

- You must move all 3 items to the specified destinations before the 2-minute time limit expires.
 - You must move the items in the order they were given.
 - You may not drop any item.
 - None of the items on the tables may hit the ground.
 - You may not ask questions or receive help once you are instructed to begin moving items.
 - You must move safely (i.e., no running, slipping, tripping, etc.).
-

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Following Directions, Continued

Sample items The table below contains photographs of items that are similar to those you will be required to locate and to move during the Following Directions event.

NOTE

The items used in the actual event may be different.

 <p>Baseball Glove</p>	 <p>Bicycle Tire</p>	 <p>Bicycle Tire Tube</p>	 <p>Car Tire</p>
 <p>Car Tire Tube</p>	 <p>Frisbee</p>	 <p>Hacksaw</p>	 <p>Hammer</p>
 <p>Horse Shoe</p>	 <p>Screwdriver</p>	 <p>Slipper</p>	 <p>Paddle</p>
 <p>Toy Truck</p>	 <p>Woman's Boot</p>	 <p>Woman's Shoe</p>	 <p>Wrench</p>

Items to be Located and Moved During the Following Directions Event

Continued on next page

Lifting with Hand Line

Introduction The lineman is a construction worker and must be able to perform work that requires physical strength. In this event, we require that you perform a simple job that occurs frequently in the field. You will be required to use a rope to raise a standard crossarm to the top of a pole, hold it there for 20 seconds, and then lower it under control to the ground. The crossarm weighs approximately 70 pounds and must be raised about 35 feet.

Safety During this event you will use personal protective equipment to ensure your safety. The school will provide the following safety items:

- Gauntlet, leather gloves
 - Hard hat
 - Safety glasses.
-

Technique As an apprentice, your initial duties will be those of the groundman. You will get tools and materials and will hoist them up to the linemen who are working high on the pole or in the aerial lift. You must have the ability to raise heavy objects without the assistance of others.

Procedure The following procedures will apply:

1. Put on all personal protective equipment.
 2. You will stand outside the hazard zone that is marked in paint on the ground.
 3. The evaluator will attach the crossarm to the lift line and will give you the rope that you will pull to raise the crossarm.
 4. Once told to begin, you will raise the crossarm up to the maximum height permitted by the rope.
 5. Once the crossarm reaches the top, the evaluator will tell you to hold it there for 20 seconds. Use only your hands to hold the rope.
 6. After the 20 seconds have elapsed, the evaluator will tell you to lower the crossarm, under control, to the ground.
-

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Lifting with Hand Line, Continued

Scoring

In order to receive a qualifying score on this event:

- You must maintain control of and not drop the crossarm. The crossarm must not slam to the ground.
 - You must raise the crossarm to the maximum height permitted by the rope, hold for 20 seconds, and then lower the crossarm within 2 minutes.
 - You may not stand on the rope.
 - You may only use your hands to hold the rope. You must not loop or wrap the rope around your hands, arms, or any other part of your body.
 - Your feet must remain outside the safety circle at all times. You must not step on or cross the safety circle line.
-