

SUMMARY

This standard outlines the requirements to protect Pacific Gas and Electric Company (PG&E) employees and contractors ("personnel" or "workers") from hazards involving falls.

Activities not covered by this standard include but are not limited to:

- 1. Short duration (i.e., non-repetitive) with:
 - a. Limited exposure
 - b. Hazards involved in rigging and installing the safety devices required equals or exceeds the hazards involved in the actual construction work
- 2. Portable Ladders For use of portable ladders refer to <u>SAFE-1010S</u>
- 3. Fixed Ladders For use of fixed ladders refer to <u>SAFE-1024S</u>
- 4. Scaffold Safety For use of scaffolding, refer to <u>SAFE-1028S</u>
- 5. Elevating Work Platforms and Aerial Devices for use of elevated work platforms and aerial devices refer to <u>SAFE-1020S</u>
- Excavation For fall protection safety requirements when conducting excavations, refer to <u>SAFE-1008S</u>
- 7. Rope Access Equipment Standard For use of rope access equipment Refer to SAFE-1023S
- 8. Tree work, maintenance, or removal
- 9. Flume patrol
- 10. Inspections (e.g., accessing customer's roof to inspect equipment)
- 11. Roofing work with a parapet wall at least 42 inches in height

TARGET AUDIENCE

- Management personnel in Lines of Business, Regions, and Departments ("LOBs") responsible for ensuring compliance requirements for fall protection are known and followed.
- Personnel providing and creating procedural content for work involving falls.



- Enterprise Health & Safety (EHS) personnel who provide expertise and cooperation to LOBs on safety-related practices and issues.
- Anyone wanting knowledge of PG&E's requirements for work involving fall protection.

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1 General Requirements

- 1.1 A fall hazard is work in any place above or below ground level where a person could be injured if they fell from that place.
 - 1. Access and egress to a place of work can also present fall hazards (e.g., sloped/uneven surfaces).
- 1.2 Examples of work activities that pose potential fall hazards include but are not limited to working:
 - 1. On a roof
 - 2. On a sloped surface greater than 40 degrees (e.g., next to a hillside)
 - 3. On a fixed/portable ladder
 - 4. At ground level adjacent to an open underground vault or manhole



- 5. From an aerial device
- 6. On poles, towers, or transformers
- 7. On/near any other unguarded surface with fall potential
- 1.3 LOB's Competent Person / Qualified Person must take into consideration the following when evaluating fall hazards:
 - 1. Location (type of terrain) Is the terrain rocky, slippery, difficult to traverse.
 - 2. Environment (windy, rainy, snowy) Can environmental factors increase the risk or magnify the potential hazards.
 - 3. Distance to the fall hazard taking in consideration 1 and 2 How far from the edge or slopped surface.
- 1.4 Fall protection requirements differ from activity to activity. LOBs must assess fall hazards/risks and develop mitigation strategies prior to conducting work.
 - 1. LOBs must have a Fall Protection Competent or Qualified Person determine which requirements apply to the work.
- 1.5 ALL equipment must be approved for use by LOBs.
- 1.6 Fall prevention and protection systems must be installed when a fall exposure exists and cannot be eliminated. These systems may include, but not be limited to, a combination of the following:
 - 1. Guardrail system
 - 2. Warning line system
 - 3. Full body harness
 - 4. Anchorage points
 - 5. Connectors
 - 6. Lifeline
 - 7. Safety nets
 - 8. Self-retracting lifeline (SRL)
 - 9. Shock-absorbing lanyard



- 1.7 During construction activities where fall hazards exist, personal fall restraint, arrest, or work positioning systems must be worn by personnel exposed to falling 6 feet or more.
- 1.8 Loading docks create many hazards and those that pose a fall risk 4 feet or more must be guarded with a barrier (e.g., guardrail, cable, warning line).

2 Fall Protection Controls

- 2.1 Permanent guardrail requirements
 - 1. Consist of top rail, mid-rail, and posts
 - 2. Have a vertical height 42 to 45 inches from the lower level
 - 3. Have top rails with smooth surfaces throughout the length of the railing
 - 4. Have mid-rail approximately halfway between the top rail and the lower level
 - 5. Have ends of the rails that do not overhang the terminal posts, unless the overhang does not create an additional hazard
 - 6. Be designed to support a live load of 20 pounds per linear foot applied either horizontally or vertically downward at the top rail
- 2.2 Temporary guardrail requirements
 - 1. Railings must be constructed of wood or equally strong materials, and must consist of:
 - a. A top rail 42 to 45 inches in height measured from the working surface to the lower.
 - 2. Screens, mesh, intermediate vertical members, solid panels, or the equivalent may be used instead of a mid-rail subject to the following:
 - a. Screens and mesh must extend from the top rail to the floor, platform, runway, or ramp and along the entire opening between top rail supports.
 - b. Vertical and other intermediate members (such as balusters, solid panels, or equivalent members) must be installed such that there are no openings greater than 19 inches wide.
 - 3. All top rails, including their connections and anchorage, must be capable of withstanding without failure:
 - a. A force of at least 200 pounds applied outward or downward.



- 4. All mid-rails, including their connections and anchorage, must be capable of withstanding without failure:
 - a. A force of at least 150 pounds applied outward or downward.
- 2.3 Wooden construction guardrail requirements
 - 1. Selected lumber must be free from damage that affects its strength.
 - 2. Wood posts must not be less than 2-inches by 4-inches in cross section, spaced at 8-foot or closer intervals.
 - 3. Top railings must be smooth and of 2-inch by 4-inch or larger material. Double, 1-inch by 4-inch members may be used for this purpose provided that:
 - a. One member is fastened in a flat position on top of the posts and the other member is fastened in an edge-up position to the inside of the posts and the side of the top member.
 - 4. Mid-rails must be of at least 1-inch by 6-inch material.
 - 5. The rails must be placed on the side of the post that will afford the greatest support and protection.
- 2.4 Standard metal pipe construction requirements
 - 1. Top rails and single mid-rail must be 1 1/2-inch outside diameter or larger.
 - 2. Posts must be 1 1/2-inches outside diameter or larger, and the spacing must not exceed 8 feet.
- 2.5 Requirements for guardrails installed after May 26, 2011 that are constructed of structural metal
 - 1. Top rails must be angle iron of at least 2-inch by 2-inch by 3/8-inch angles or other metal shapes of equivalent bending strength.
 - 2. Single mid-rail, where permitted, must be iron or steel of at least 2-inch by 2-inch by 3/8-inch angles or other metal shapes of equivalent strength.
 - 3. Posts must be angle iron of at least 2-inch by 2-inch by 3/8-inch stock, and the spacing must not exceed 8 feet.
- 2.6 Toeboard requirements



- 1. A toeboard is required any time there is a potential for tools, equipment, or materials to fall from a surface equipped with a guardrail.
- 2. Toeboards must be constructed of wood, metal, or other suitable material.
 - a. Where constructed of metal grille, mesh must not exceed 1-inch.
- 3. Toeboards must be at least 4 inches nominal.
- 4. Bottom clearance must not exceed 1/4 inch.
- 5. Materials cannot be piled higher than toeboards without additional safety measures such as:
 - a. Paneling/mesh from floor to intermediate rails or top rail.
 - b. Securing equipment, tools, or materials.
- 2.7 Positioning device systems
 - 1. Positioning devices must be rigged so the user cannot free fall more than 2 feet.
 - 2. Anchorage points for positioning device systems must be capable of supporting 2 times the intended load or 3,000 pounds, whichever is greater.
- 2.8 Personal fall restraint
 - 1. Body belts or harnesses may be used for personal fall restraint.
 - a. Body belts may be used in a very limited capacity (e.g., work off wooden poles, inside bucket trucks) and never for fall arrest.
 - 2. Body belts must be at least 1-5/8 inches wide.
 - 3. Lanyards must be secured to:
 - a. An engineered anchor point (anchor point identified by Fall Protection Qualified or Competent Person).
 - 4. Lifelines and anchorages must be capable of supporting 4 times the intended load.
- 2.9 Personal fall arrest systems
 - 1. Fall arresting, descent control, and rescue equipment must be approved (see definition) for use by LOBs and be used in accordance with the manufacturer's recommendations.



- 2. If personnel duties require horizontal movement:
 - a. Rigging must be provided so that the attached lanyard will slide along with the user.
 - b. If lifeline will not allow for sliding, dual lanyards are required to maintain 100% tie-off.
- 3. Where there are electrical exposures, systems/harnesses must be flame-resistant (FR) rated.
 - a. Personal fall arrest and positioning equipment used by personnel who are exposed to hazards from flames or electric arcs must be approved by LOBs.
- 4. Horizontal lifelines must be designed, installed, and used under the supervision of a Fall Protection Qualified Person as part of a complete personal fall arrest system that maintains a safety factor of at least 2.
- 5. When vertical lifelines are used, personnel must be attached to separate lifelines.
- 6. Lifelines must be protected against being cut or abraded.
- 7. Lanyards must be rated for 5,000 pounds.
- 8. SRLs must:
 - a. Automatically limit free fall distance to 2 feet or less.
 - (1) SRLs that do not limit free fall distance to 2 feet or less (e.g., rip-stitch, tearing and deforming) must be capable of sustaining a minimum tensile load of 5,000 pounds applied to the device with the lifeline or lanyard in the fully extended position.
 - b. Be capable of sustaining a minimum tensile load of 3,000 pounds applied to the device with the lifeline or lanyard in the fully extended position.
- 2.10 Anchorages used for attachment of personal fall arrest equipment must:
 - 1. Be independent of any anchorage being used to support or suspend platforms.
 - 2. Be capable of supporting at least 5,000 pounds per user attached, OR must be:
 - a. Designed, installed, and used as part of a complete personal fall arrest system that maintains a safety factor of at least 2 and used under the supervision of a Fall Protection Qualified Person.



- 2.11 When stopping a fall, personal fall arrest systems must:
 - 1. Limit maximum arresting force on a user to 1,800 pounds when used with a body harness.
 - 2. Be rigged such that personnel:
 - a. Cannot free fall more than 6 feet.
 - b. Cannot contact any lower level.
 - 3. Ensure that anchor end of the lanyard is secured at a level not lower than the user's waist (belt line).
 - 4. Bring to a complete stop and limit maximum deceleration distance a user travels to 3.5 feet.
- 2.12 Fall protection components must be used only with fall protection systems and NOT in rigging applications such as hoisting equipment or materials.
- 2.13 Body belts used in conjunction with fall restraint systems or positioning devices must limit the maximum arresting force on a user to 900 pounds.
- 2.14 Personal fall arrest systems must not be attached to hoists or guardrails unless they are designed for that purpose.
- 2.15 Safety net systems
 - 1. When the use of personal fall restraint, fall arrest systems, positioning device systems, or more conventional types of protection are clearly impractical for work activities at 25 feet or more above the ground, water surface, or continuous floor level below, the exterior and/or interior perimeter of the structure must be:
 - a. Provided with a safety net extending at least 8 feet horizontally from the perimeter.
 - b. Positioned at a distance not to exceed 10 feet vertically below the hazards.
 - 2. Safety nets must extend outward from the outermost projection of the work surface as follows:

Vertical distance from working level to	Minimum required horizontal distance
horizontal plane of net	of outer edge of net from the edge of
	working surface.



Up to 5 feet	8 feet
More than 5 feet up to 10 feet	10 feet
More than 10 feet but not exceeding 30 feet	13 feet

- Nets must be hung with enough clearance to prevent the user's contact with the surfaces or structures below. Such clearances must be determined by impact load testing.
 - a. A Fall Protection Competent or Qualified Person must determine the fall distance clearances.

2.16 Fall protection plan

- 1. A fall protection plan
 - a. ONLY required when other conventional fall protection systems (e.g., guardrails, personal fall restraint/arrest systems) are not feasible or create a greater hazard
 - b. Is the least-desired control and low in the hierarchy (high liability)
 - c. Used only as a last resort
- 2. The fall protection plan must:
 - a. Be prepared by a Fall Protection Qualified Person.
 - b. Be implemented under the supervision of a Fall Protection Competent or Qualified Person.
 - c. Be developed specifically for the site or task where the work is being conducted (it may be throughout PG&E territory).
 - d. Document the reasons why the use of conventional fall protection systems (e.g., guardrails, personal fall restraint/arrest systems) are not feasible or why their use would create a greater hazard.
 - (1) Where no other alternative measure has been implemented, the LOB must implement a safety monitoring system.
 - e. Identify any other measures that must be taken to reduce the fall hazard exposure.



- f. Identify each location where conventional fall protection methods cannot be used.
 - (1) These locations will be classified as controlled access zones (CAZs)
- g. Be kept up to date.
- h. Document the identity of the Fall Protection Competent or Qualified Person.
- 3. Any changes to the fall protection plan must be approved and documented by a Fall Protection Qualified Person.
- 4. A copy of the fall protection plan must be available at the job site.
- 2.17 CAZs and safety monitoring
 - 1. When used to control access to areas where there is a leading-edge flat roof or work platform with missing guardrail, the CAZ must be defined by a control line or by any other means that restricts access.
 - a. Signs must be posted to warn unauthorized personnel to STAY OUT of the controlled access zone.
 - 2. When control lines are used, they must be erected at least 6 feet and not more than 25 feet from the unprotected or leading edge.
 - 3. The control line must extend along the entire length of the unprotected or leading edge and must be parallel to the unprotected or leading edge.
 - 4. The control line must be securely connected on each side.
 - 5. Control lines must have a minimum breaking strength of 200 pounds and:
 - a. Each line must be flagged or otherwise clearly marked at not more than 6-foot intervals with high-visibility material.
 - b. Each line must be rigged and supported in such a way that its lowest point (including sag) is not less than 39 inches from the working level and its highest point is not more than 45 inches in height.
 - 6. Personnel working in a CAZ must comply with warnings from safety monitors.
 - a. Include a statement that provides the name or other method of identification for personnel (e.g., job title, LAN ID) authorized to work in CAZs.
 - 7. No unauthorized personnel may enter a CAZ unless work is stopped.



- 8. LOBs must ensure that the safety monitor:
 - a. Is current with Fall Protection Competent or Qualified Person training.
 - b. Has no other responsibilities that could take the monitor's attention from the monitoring function.
 - c. Is constantly within visual sighting distance of personnel being monitored and able to maintain communication with them.
 - d. Warns personnel when it appears, they are unaware of a hazard or acting in an unsafe manner.

3 Training

- 3.1 LOBs must ensure personnel who are exposed to fall hazards are current with their level of fall protection training (authorized, competent, qualified, etc.).
- 3.2 Retraining is required when:
 - 1. LOBs have reason to believe that personnel who have previously received training have not retained the understanding and skill required to work safely using fall protection systems.
 - 2. Changes in the workplace render previous training insufficient or obsolete.
 - 3. Changes in the types of fall protection systems or equipment render previous training insufficient or obsolete.
 - 4. Regulatory agencies mandate it.

4 Compliance Assurance Requirements

- 4.1 EHS safety personnel must verify critical controls are in place during site assessments.
- 4.2 Critical controls/evidence of compliance includes but is not limited to:
 - 1. Hazard identification and related controls:
 - a. Hazard/risk assessment has been conducted prior to start of work.
 - b. Hierarchy of controls have been considered/followed during fall protection mitigation selection criteria.
 - c. Documented procedures that identify scope, purpose, authorization, rules, and techniques for fall protection are in place and followed.



- d. Emergency/rescue procedures are developed and compliant/efficient.
- e. Fall protection plan(s) reviewed if utilized.
- f. Inspection is completed and documented when required.
- g. Drop zones are established and maintained as required.
- h. Regulatory requirements are identified and followed.
- i. Fall protection standard overall requirements are followed.
- 2. Competency controls
 - a. Personnel are trained to their required level of responsibility (Fall Protection Authorized User, Fall Protection Competent Person, Fall Protection Qualified Person).
 - b. Personnel demonstrate competency by explaining their responsibilities in fall protection (e.g., how to inspect fall protection equipment, identifying anchor points, understanding fall restraint vs. fall arrest).
 - c. Human performance tools are used (e.g., 3-way communication, eyes on path).
- 4.3 LOBs must:
 - 1. Audit fall protection procedures every 5 years and document the findings, entering corrective actions into the Enterprise Corrective Action Program (ECAP).
 - 2. Conduct periodic unannounced audits (at least once a month) and document the findings, entering corrective actions into ECAP.
- 4.4 LOB Field Supervision must:
 - 1. Ensure all personnel comply with fall protection requirements and procedures.

5 Inspection

- 1. Equipment used in fall protection must be:
 - a. Inspected each time prior to use for wear, damage, and other deterioration.
 - b. Removed from service if damaged.
- 2. Any lanyard, safety belt, harness, dropline, lifeline, or other fall protection-related component subjected to in-service loading, as distinguished from static load testing, must immediately be removed from service.



- 3. Personal fall arrest systems must be inspected:
 - a. At least twice a year by a Fall Protection Competent or Qualified Person in accordance with the manufacturer's recommendations.
 - b. Defective components must be immediately removed from service.

6 Emergency Procedures

- 1. LOBs must ensure a rescue plan is developed before fall protection solutions are implemented. The plan must address the following questions:
 - a. What rescue types need to be planned for (self, assisted, multiple personnel)?
 - b. The roles and responsibilities by all members involved in the rescue?
 - (1) Who will call Emergency Medical Services (EMS) "911"?
 - (2) If required, who will meet EMS?
 - c. Where will rescue likely be performed?
 - d. What equipment is required (e.g., suspension trauma straps, ropes, ladders)?
 - e. Where is the rescue equipment located?
 - f. What are the best rescue routes?
 - g. How will the emergency be communicated?
- 2. Prior to performing rescue work, rescuers must be trained in the selection, inspection, use, storage, and maintenance of the equipment according to the requirements of this standard and the manufacturer's instructions.
- 3. Rescue team must conduct rescue drills once a year. Drills must cover reasonably expected rescue scenarios identified by LOBs.
- 4. Rescue team must take refresher training every three years.

7 Recordkeeping

- 7.1 Inspections of fall protection equipment other than pre-use must be documented. Documented inspections must denote:
 - 1. Name of person conducting inspection.



- 2. Designation of person conducting inspection (Fall Protection Competent or Qualified Person).
- 3. Date of inspection.
- 4. Condition of equipment being inspected.
- 7.2 LOBs must keep records of all site assessments, audits, and inspections for current calendar year.
- 7.3 LOBs must maintain written documentation of procedures and programs per <u>GOV-7101S</u>, <u>"Enterprise Records and Information Management Standard.</u>"

8 Roles and Responsibilities

- 1. Fall Protection Authorized Persons must be current in their training and responsible for, but not limited to:
 - a. Completing and following training developed under this standard.
 - b. Wearing required fall protection PPE.
 - c. Following fall protection guidance documents developed under this standard.
 - d. Participating and contributing to daily hazard analysis/JSSA.
 - e. Stopping work and engaging a Fall Protection Competent or Qualified Person if unsure about safety.
- 2. Fall Protection Competent Persons must be current in their training and responsible for, but not limited to:
 - a. Assessing the hazards and determining if fall protection will be used.
 - b. Selecting a fall protection system.
 - c. Advising and supervising authorized users.
 - d. Supervising work conducted under a fall protection plan.
 - e. Conducting and documenting fall protection system inspections twice a year.
 - f. Stopping work and engaging a Fall Protection Qualified Person if unsure about safety.
- 3. Fall Protection Qualified Persons must be current in their training and responsible for, but not limited to:



- a. Identifying anchorages.
- b. Supervising horizontal lifeline (HLL) installation and use.
- c. Developing and revising fall protection plans.
- d. Contacting a Fall Protection Qualified Person professional engineer when unsure about safety.
- 4. Fall Protection Qualified Persons with a professional engineering designation must be current in their training/designation and responsible for, but not limited to:
 - a. Supporting Fall Protection Competent or Qualified Persons.
 - b. Designing and/or approving specialized fall protection systems.

END of Requirements

DEFINITIONS

Approved: Products, materials, devices, systems, or installations that have been approved, listed, labeled, or certified as conforming to applicable governmental or other nationally recognized standards, or applicable scientific principles. The approval, listing, labeling, or certification of conformity must be based upon an evaluation performed by a person, firm, or entity with appropriate registered engineering competence or by a person, firm, or entity, independent of the manufacturer or supplier of the product, with demonstrated competence in the field of such evaluation. The term "approved" also refers to products, materials, devices, systems, or installations that have been approved, listed, labeled, or certified by a Nationally Recognized Testing Laboratory (NRTL).

Anchorage point: A secure point of attachment for lifelines, lanyards, or deceleration devices.

Body belt: A simple or compound strap with means for securing it about the waist and for securing a lanyard to it.

Body harness: Straps that may be secured about a user in a manner that will distribute the fall arrest forces over at least the thighs, pelvis, waist, chest and shoulders with means for attaching it to other components of a personal fall arrest system.

Buckle: Any device for holding the body belt or body harness closed around the user's body.

Carabiner: A link with a gate that is normally closed or that automatically closes, and is used to connect components of a personal fall protection system.



Competent Person: Personnel designated by the LOB who can identify existing and predictable hazards in the surroundings or working conditions, and who are authorized to take prompt corrective measures to eliminate them.

Connector: A device used to couple (connect) parts of the personal fall arrest system and positioning device systems together. It may be an independent component of the system, such as a carabiner, or it may be an integral component of part of the system (such as a buckle or dee-ring sewn into a body belt or body harness, or a snap hook spliced or sewn to a lanyard or SRL).

Controlled access zone (CAZ): An area in which certain work may take place without the use of guardrails, personal fall arrest systems, or safety nets, and to which access is controlled.

Deceleration device: Any mechanism, such as a rope grab, rip-stitch lanyard, speciallywoven lanyard, tearing or deforming lanyard, or automatic SRL, that serves to dissipate a substantial amount of energy during a fall arrest, or otherwise limit the energy imposed on the user during fall arrest.

Deceleration distance: The additional vertical distance a falling person travels, excluding lifeline elongation and free fall distance, before stopping, from the point at which the deceleration device begins to operate. It is measured as the distance between the location of the person's body belt or body harness attachment point at the moment of activation (at the onset of fall arrest forces) of the deceleration device during a fall, and the location of that attachment point after the person comes to a full stop.

Defect: Any characteristic or condition that tends to weaken or reduce the strength or the safety of the tool, machine, object, or structure of which it is a part.

Drop line (safety line): A vertical line from a fixed anchorage, independent of the work surface, to which the lanyard is affixed.

Free fall: The act of falling before a personal fall arrest system begins to apply force to arrest the fall.

Free fall distance: The vertical displacement of the fall arrest attachment point on the user's body belt or body harness between onset of the fall and just before the system begins to apply force to arrest the fall. This distance excludes deceleration distance, and lifeline/lanyard elongation, but includes any deceleration device slide distance or SRL extension before they operate and fall arrest forces occur.

Lanyard: A flexible line to secure a wearer of a safety belt or harness to a drop line, lifeline, or fixed anchorage.

Ladder safety system: A system attached to a fixed ladder designed to eliminate or reduce the possibility of a worker falling off the ladder. A ladder safety system usually consists of a carrier, safety sleeve, lanyard, connectors, and body harness.



Leading edge: The edge of a floor, roof, or formwork for a floor or other walking/working surface (such as the deck) which changes location as additional floor, roof, decking, or formwork sections are placed, formed, or constructed. A leading edge is considered to be an "unprotected side and edge" during periods when it is not actively and continuously under construction.

Lifeline: A horizontal line (catenary line) between 2 fixed anchorages, independent of the work surface, to which the lanyard is secured either by tying off or by means of a suitable sliding connection. For the purposes of these orders, lifelines may be vertical as well as horizontal (i.e., when used with a body harness).

Mid-rail: A rail, approximately midway between the top rail and platform, that is secured to the uprights erected along the exposed sides and ends of platforms.

Personal fall arrest system: A system used to arrest the user in a fall from a working level. It consists of an anchorage, connectors, a body belt, or body harness, and may include a lanyard, deceleration device, lifeline, or combinations of these. The use of a body belt for fall arrest is prohibited.

Personal fall restraint system: A system used to prevent a person from falling. It consists of anchorages, connectors, body belt/harness. It may include lanyards, lifelines, and rope grabs designed for that purpose.

Personal fall protection system: A personal fall protection system includes personal fall arrest systems, positioning device systems, fall restraint systems, safety nets, and guardrails.

Positioning device system: A body belt or body harness system rigged to allow the user to be supported on an elevated surface, such as a wall, and work with both hands free while leaning.

Qualified Person: A person designated by the LOB who by reason of training, experience, or instruction has demonstrated the ability to safely perform all assigned duties and, when required, is licensed in accordance with federal, state, or local laws and regulations.

Safety belt or harness: A device specifically for the purpose of securing, suspending, or retrieving a person in or from a hazardous work area.

Safety factor: Ratio of the ultimate breaking strength of a member or piece of material or equipment to the actual working stress or safe load when in use.

Safety line: A line that is provided to protect the user from falls caused by failure of scaffolds, working platforms, or loss of balance, and which must extend to within 4 feet of the ground or other stable surface.

Safety-monitoring system: A safety system in which a Competent Person is responsible for recognizing and warning personnel of fall hazards.



Safety net: A passive type of fall protection designed to catch a worker after they have fallen to help prevent contact with the surface below and to prevent injury. Safety nets are erected around an elevated work area in such a way that if a worker falls from that work area, they will be caught in the net.

Safety strap: A web strap designed specifically for use in conjunction with a lineman's belt as an aid in climbing poles and to secure the lineman to the pole in a manner that permits work with both hands.

Selected lumber: Douglas fir that has been graded under standards as high as those followed by the West Coast Lumber Inspection Bureau or by the Western Wood Products Association as suitable for a bending stress of 1,500 psi.

Self-retracting lifeline/lanyard (SRL): A deceleration device containing a drum-wound line that can be slowly extracted from, or retracted onto, the drum under slight tension during normal user movement, and which, after onset of a fall, automatically locks the drum and arrests the fall.

Shock absorbing lanyard: A specific type of safety lanyard used in conjunction with safety harnesses as a part of a fall protection system.

Snap hook: A connector comprised of a hook-shaped member with a normally closed keeper, which may be opened to permit the hook to receive an object and, when released, automatically closes to retain the object.

Unprotected sides and edges: Any side or edge (except at entrances to points of access) of a walking/working surface, e.g., floor, roof, ramp, or runway where there is no wall or standard guardrail or protection provided (see Leading Edge).

Warning line system: A barrier erected on a roof to warn personnel that they are approaching an unprotected roof side or edge, and which designates an area in which roofing work may take place without the use of guardrail, body belt, or safety net systems to protect personnel in the area.

IMPLEMENTATION RESPONSIBILITIES

Officers and directors are responsible for implementing the Fall Protection Standard within their organization. Directors, managers, and supervisors are responsible for communicating the standard to all personnel and ensuring that their personnel understand and properly implement the requirements of this standard.

Each LOB must conduct an assessment in 2021 of their current state of performance relative to the requirements of this standard and identify and execute the actions required to close gaps and achieve compliance. Annual self-assessment must be conducted to monitor action plan closure and conformance with the requirements.



GOVERNING DOCUMENT

SAFE-1001S, Safety and Health Program

SAFE-4200S, HSMS Operational Control Standard

COMPLIANCE REQUIREMENT/REGULATORY COMMITMENT

Records and Information Management:

PG&E records are company assets that must be managed with integrity to ensure authenticity and reliability. LOBs must manage Records and Information in accordance with the Enterprise Records and Information (ERIM) Policy, Standards and Enterprise Records Retention Schedule (ERRS). Each LOBs is also responsible for ensuring records are complete, accurate, verifiable and can be retrieved upon request. Refer to <u>GOV-7101S</u>, <u>"Enterprise Records and Information Management Standard</u>" for further records management guidance or contact ERIM at <u>Enterprise RIM@pge.com</u>."

29 CFR 1926 Subpart M – Fall Protection

Title 8 CCR Subchapter 4. Article 16. Section 1620. Design and Construction of Railings

Title 8 CCR Subchapter 4. Article 19. Floor, Roof, and Wall Openings

Title 8 CCR Subchapter 4. Article 24. Fall Protection

Title 8 CCR Subchapter 7. Group 1. Article 2. Section 3209. Standard Guardrails

<u>Title 8 CCR Subchapter 7. Group 1. Article 2. Section 3212. Floor openings, Floor Holes,</u> <u>Skylights and Roofs</u>

REFERENCE DOCUMENTS

Developmental References:

Supplemental References:

ANSI Z359 – Safety Requirements for Fall Protection Systems

APPENDICES

NA



ATTACHMENTS

NA

DOCUMENT RECISION

NA

DOCUMENT APPROVER

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